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C O N T E N T S

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GOVERNMENT AID TO WHEAT PRODUCERS

. . . By D. F. Christy*

Because it is so widely grown, wheat has been subject to more government intervention than any other crop. This study does not trace all the various stages in the development of government aid to wheat producers. It attempts only to point out the more important measures now in force and to analyze the causes for the evolution of aid to wheat producers and the probable effects of existing measures.

Taking the world as a whole, wheat might well be called the bellwether of all agricultural products. It is almost universally grown, and probably more farmers are dependent on the profitability of wheat production than on that of any other single crop. Because of this widespread influence on the agricultural economy of the various countries, wheat has been the subject of primary consideration in drafting agricultural relief measures.

In nearly all countries these measures have been designed to increase the price received by wheat producers. This is true of both importing and exporting countries, though naturally the methods used by these two groups of countries differ materially.

MEASURES ADOPTED BY IMPORTING COUNTRIES

In the importing countries the use of import duties even before the war was, with a few important exceptions, such as the United Kingdom, the Netherlands, and Belgium, a traditional practice, designed to maintain domestic prices or to provide needed revenue. Governments were careful, however, not to impose duties so high as to result in unduly high bread prices, since bread was generally the most important item in the diet of the people.

After the World War, however, many of the European importing countries seized upon import duties as a medium through which domestic wheat production could be encouraged; and, as the idea of self-sufficiency, or economic nationalism, took hold in one country after another, import duties were increased rapidly. Table 1 shows a comparison of import duties in the principal importing countries for 1913, 1929, and 1938.

The imposition of high import duties may work in various ways. If fully effective, they result in prices so high as to discourage consumption in importing countries, and undoubtedly this has occurred in some cases. The major effect, however, seems to have fallen on the exporting countries, which have been forced to offer their wheat at lower and lower prices.

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Table 1. Comparative import duties on United States wheat in specified foreign countries, January 1, 1914, 1929, and 1938

Country	January 1		
	1914	1929	1938
	Cents per bushel	Cents per bushel	Cents per bushel
Europe			
Austria	a/ 34.8	11.0	150.6
Belgium	Free	Free	Free
Bulgaria	3.2	9.6	66.7
Czechoslovakia	--	24.2	71.7
Denmark	Free	Free	Free
Estonia	---	52.5	80.8
Finland	Free	48.0	60.1
France	36.8	37.4	87.5
Germany	35.7	32.4	b/ 383.7 or 11.0
Greece	36.4	38.4	39.3
Hungary	a/ 34.8	34.7	39.4
Ireland	Free	Free	Free
Italy	39.4	57.8	25.8
Latvia	---	36.8	Free
Lithuania	---	81.6	138.2
Netherlands	Free	Free	Free
Norway	4.4	Free	Free
Poland	---	33.6	129.1
Portugal	c/	c/	c/
Rumania	0.7	9.8	90.9
Soviet Union	Free	Free	Free
Spain	41.7	110.3	9.8
Sweden	27.0	27.0	26.0
Switzerland	1.6	3.2	3.8
Turkey	11% ad valorem	20.4	152.1
United Kingdom	Free	Free	6.2
Yugoslavia	---	13.2	82.4
Other countries			
Argentina	Free	Free	13.2
Australia	21.9	29.4	23.9
Brazil	13.9	13.1	10.4
Canada	12.0	12.0	12.0
China	Free	Free	9.9
Cuba	13.1	8.7	8.7
Egypt	8% ad valorem	8% ad valorem	103.2 to 168.0
Japan	17.4	33.9	32.9
Mexico	40.7	44.1	77.8
Union of South Africa	17.0	23.0	d/ 32.9
Uruguay	38.0	38.0	24.4

Conversions into United States currency made at average rates of exchange for January 1914, 1929, and 1938.

a/ Austria-Hungary.

b/ Special reduced rate (11 cents per bushel) when imported for the account of the Government monopoly.

c/ Wheat may be imported only by authority of special decrees, which also fix rates of duty.

d/ There is, in addition, a special customs duty equal to the difference between import cost and fixed price.

The increased duties, together with other measures that will be discussed later, resulted in increased production of wheat in importing countries and lessened the demand for the surplus wheat of exporting countries. It seems apparent that the effect of increased duties is to widen the spread between prices received by exporting countries and prices at which wheat is sold in importing countries. And since importing countries have in many cases fixed a ceiling on internal prices, the major result has been a reduction in prices received by exporters.

The restriction of imports through use of import duties is now largely an academic question. It is true that, so long as a country does not produce enough wheat for its own needs, duties will tend to support prices received by wheat producers in the importing country. Duties alone, however, do not effectively control the actual volume of imports. This is due to the importance of bread in the diet and the relatively inelastic demand for it. Many importing countries, however, found it necessary to reduce imports because of foreign-exchange difficulties. As a result, most of them turned to more effective devices, such as import quotas and licenses, mixing regulations, foreign-exchange restrictions, and eventually monopolies.

In table 2, the principal importing countries have been classified with respect to the type of quantitative restrictions used by them. It will be noted that a number of countries have adopted more than one method of restricting wheat imports.

Table 2. Types of barriers to wheat imports in specified countries, August 1938

Monopoly control	Milling quotas	Import quotas	Import permits and licenses	Special taxes other than duties [a/]
Czechoslovakia	Brazil	Switzerland	Belgium	Belgium
Estonia	France	Greece	Denmark	Czechoslovakia
France	Italy	Finland	Ireland	Egypt
Germany	Netherlands		Sweden	Netherlands
Italy	Sweden		Brazil	Sweden
Latvia	Ireland			Germany
Netherlands	Belgium			Brazil
Norway	Germany			Denmark
Switzerland	Finland			Italy
Greece	Mexico			Switzerland

a/ Includes all special taxes other than import duties that apply primarily to imported wheat; for example, import-license tax, quay tax, import-permit fee, milling tax, monopoly fee.

Milling Quotas

One of the earliest methods adopted for strictly quantitative control of imports was the milling quota. This is a device for limiting the amount of imported wheat that may be mixed with domestic wheat for the manufacture of flour. The quantity of wheat permitted to be imported is generally just sufficient to supplement the domestic crop so that total supplies will equal domestic requirements.

This does not always follow, however, since wheat grown in the importing countries is generally of a soft type of inferior quality for bread making and requires the admixture of a certain percentage of strong or high-gluten wheat. Milling quotas have therefore tended to limit imports to the strongest available wheats. Even so, the quality of the bread in many countries has deteriorated, and this has brought about a reduction in consumption.

In certain countries, where domestic production of wheat is sufficient, or nearly sufficient, for domestic requirements, some additional device has been employed

to export a part of the domestic soft wheat and replace it by imports of strong wheats in order to maintain the quality of the bread. The usual device is to use the duties collected on imported strong wheats to subsidize exports of domestic soft wheats, which thus come into competition with the surpluses of exporting countries.

Foreign-Exchange Control

The control of foreign exchange on the part of a number of importing countries has proved a very effective means of regulating imports. This method has been adopted in Germany and certain other countries where a shortage has compelled them to regulate the use of available foreign exchange. In this way, the importing country not only determines the products for which foreign exchange will be expended but also the sources from which these products will be obtained. The tendency has been to use this device for bringing about a bilateral balance of trade with individual countries. This has worked to the disadvantage of the United States, which normally sells to the wheat-importing countries considerably more goods than it buys from them.

Monopolies

The most effective, and therefore one of the most widely used, devices for controlling imports is the monopoly. The use of milling quotas and other quantitative restrictions has in fact contributed to the establishment of the monopoly, because in this way restrictive devices can operate more efficiently.

Monopolies enable a country completely to control all trade in wheat, both import and export, and in some countries, such as Germany, the control is extended to the internal market. A government monopoly is also a very effective device for controlling the source from which imported wheat is obtained and is therefore more or less essential in conducting trade under barter or clearing agreements.

Among the more important wheat-importing countries that now have monopolies are Germany, Italy, and France. In Germany and Italy, monopoly control of imports and fixed domestic prices have resulted in an expansion of wheat production to such an extent that in the latter it is now almost sufficient, in years of favorable yields, for domestic needs. In France, production in recent years has frequently exceeded domestic requirements.

Import Permits and Licenses

In some countries, import permits and import licenses are corollaries to the established monopolies. In others, they are used as separate devices that in themselves constitute a strict control of imports. In any case, the use of such permits or licenses necessarily implies a greater or lesser degree of governmental control and borders on a monopoly in application, if not in form.

Special Taxes and Fees Other than Duties

Measures for controlling the quantity of wheat imported generally carry with them the use of special taxes and fees. These charges may be used either for covering administrative costs of the import control or as additional duties or charges on imports. In Germany, for example, import monopoly fees vary in such a way as to bring the cost of the imported article up to the price fixed for the domestic article.

A partial list of import restrictions on wheat, other than import duties, is given in table 3. Restrictions on imports of wheat flour, including import duties, are shown in table 4.

Table 3. Other restrictions on wheat imports in principal importing countries, August 1938

Country	Milling quotas [a/]	Licenses and monopolies	Partial list of other measures [b/]
	Percent		
Belgium	25	Import license	Import-license tax 20 francs per 100 kilos (18 cents per bushel).
Brazil	5	Import permit	Bonus to growers authorized but none paid as yet.
Czechoslovakia	-	Monopoly	Import-permit fee, 1 percent ad valorem; fixed prices.
Denmark	-	Import and export permit	Import tax varied so that internal cost of imported wheat equals domestic fixed price.
Egypt	-	-	Quay tax, 10 percent of duty; surtax, 3 percent ad valorem; export subsidy on trial.
Estonia	80	Import and export monopoly	Government purchases for export; fixed price.
Finland	-	-	All transactions foreign grain reported to Government.
France	100	Import and export monopoly	National Wheat Board fixes wheat price.
Germany	-	Monopoly-control board	Fixed prices and price margins; compulsory delivery all wheat fit for human consumption; distilling and feeding prohibited.
Greece	33	-	Purchase of domestic wheat by Government at prices above world quotation.
Ireland	25	Import license	Importers must be licensed and registered; registered wheat millers pay fixed minimum price to growers.
Italy	99	Monopoly import license	Government fixes price, regulates sales, controls foreign trade; license tax 3 percent ad valorem.
Japan	-	-	Drawback: Wheat duty refunded when exported as flour.
Latvia	-	State Grain Monopoly	Compulsory processing regulations; fixed prices.
Netherlands	35	Monopoly	Monopoly import tax, 2.50 florins per 100 kilos (37 cents per bushel); fixed prices.
Norway	-	State Grain Monopoly	Bounty to producers for grain used on farm; guaranteed minimum price for grain marketed.
Sweden	90	Import permit	Milling tax, 1.50 crowns per 100 kilos (10 cents per bushel) on all milling wheat; exports licensed.
Switzerland	-	Import quotas	Government agency buys from growers at fixed price and sells to millers.
United Kingdom	-	-	Empire wheat duty-free; domestic production subsidized to extent of 57 million bushels.

All conversions to United States currency made at August 1938 rates of exchange.
[a/] Percentage domestic wheat required.
[b/] Exchange regulations are in use in most of the countries listed.

Table 4. Import duties and other restrictions on wheat-flour in principal importing countries, August 1938

Country	Import duties		Mixing regulations	Licenses and monopolies	Other measures[b]
	Original units	United States cents[a]			
	Per 100 kilos	Per 100 pounds			
Belgium	4.60 francs	7	-	Import quotas; import licenses for flour for special purposes	License tax, 28 francs per 100 kilos (43¢ per 100 lb.). No licenses issued for flour for bread making.
	Per legal ton				
Brazil	170.489 milreis	45	2% manioc flour required	Import permit	Import tax, 0.600 milreis per 44-kilo bag (4¢ per 100 lb.); proceeds used for encouraging wheat cultivation.
	Per 100 kilos				
China	1.364 gold units	42	-	-	
Japanese-controlled territory	Free	Free	-	-	
Cuba:[c]					
From U. S. wheat	78 cents	35	-	-	Certificate of origin of wheat in flour required.
From other wheat	91 cents	41	-	-	
Czechoslovakia	150 crowns	235	-	Monopoly (Import permit)	Import-permit fee, 1% ad valorem; fixed price.
Denmark	Free	Free	-	Import and export permit	Subject to import tax (variable); not levied at present time. Imports for human consumption regulated by Exchange Control Board.
Egypt	1090 to 1555 milliemes	247 to 353	-	-	Quay tax, 10% of duty, and surtax, 3% ad valorem.
Estonia:					
Sifted	29 crowns	356	-	Import and export monopoly	Reciprocal agreements.
Unsifted	18 crowns	221	-		
Finland:					
White flour:					
On quota	160 F. marks	156	80% domestic	-	Import quotas under trade agreement with the United Kingdom.
Excess of quota	185 F. marks	180			
Graham	115 F. marks	112			
France:					
70% extraction or more	154.20 francs	191	Imports of wheat for milling controlled[d]	Import and export monopoly	Milling tax; millers also pay yearly license tax; milling quota; fixed prices.
61% to 69% extraction	192.70 francs	238			
60% extraction & less	222.90 francs	276			

Germany	59.84 reichsmarks	1088	Admixture of 7% corn flour to all wheat flour	Monopoly Control Board	Types of wheat flour permitted reduced from 8 to 1; degree of extraction raised from 75 to 78-80.
Greece	18.725 metallic drachmas	152	66% domestic or penalty tax	Special permit	Extraction restricted to 78%, or 92% for bread making.
Ireland	Free	Free	24% domestic wheat	Import license	Mills licensed and milling quotas allotted.
Italy	68.90 lire	164	Compulsory admixture, 10% corn flour [2/]	Import and export license	Special license tax, 3% ad valorem. Inclusion of durum wheat flour in bread making prohibited. [2/]
	Per 100 kin				
Japan	4.30 yen	92	-	-	-
Latvia:	Per 100 kilos				
Bolted	25.00 lats	228	Government to fix extraction ratios	State Grain Monopoly	Importation only upon evidence of purchase of stipulated quantities of domestic wheat or wheat flour.
Unbolted	10.00 lats	91			
Netherlands:					
In bulk	Free	Free	Only 5% unmixed foreign flour permitted bakers	Import monopoly	Monopoly import tax, 5.87 florins per 100 kilos ($1.45 per 100 lb.); trade agreement with United States.
In small packages	10% ad valorem	10% ad valorem			
Norway	Free	Free	-	State Grain Monopoly	Fixed prices.
Sweden	6.50 crowns	74	90% domestic	Import and export license	Import tax, 4 crowns per 100 kilos (42¢ per 100 lb.); proceeds used for expenses of grain-control system.
Switzerland	4.50 francs	47	-	Monopoly (Import permit)	Compensatory duty on flour for bread making fixed by Federal Council.
United Kingdom	10% ad valorem	10% ad valorem	-	-	Empire flour exempt from duty; tax on domestic and imported flour for subsidizing domestic wheat production.

a/ Conversions to United States currency made on the basis of average exchange for August 1938.

b/ Exchange regulations are in use in most of the countries listed.

c/ Minimum rate, $1.30 per 100 kilos (59 cents per 100 pounds); the United States received 20 percent preference except on flour produced from United States wheat which, under trade agreement with Cuba, receives 40 percent preference.

d/ Foreign wheat for mixing prohibited unless a specified quantity of domestic wheat or flour has been exported.

e/ In the making of alimentary pastes it is obligatory to use a flour that is a mixture of 60 percent hard wheat and 40 percent soft wheat.

The most important effects of all these restrictive measures have been to increase production in importing countries and to curtail international trade in wheat. Thus production in Europe, exclusive of Russia and the Danube Basin exporting countries, reached 1,327 million bushels in 1938 compared with an average production of 1,043 million bushels during the period 1925-1929. World wheat shipments, on the other hand, totaled only about 500 million bushels in 1937-38, compared with an average of about 750 million bushels during the 5 years ended with 1928-29. See figures 1 and 2.

MEASURES ADOPTED BY EXPORTING COUNTRIES

In the face of the reduced export outlet, the acreage of wheat in major exporting countries has continued to increase. Efforts have been made to curtail acreage, notably under the Agricultural Adjustment Administration program in the United States and internationally through the International Wheat Agreement, signed in August 1933. The United States program, however, was invalidated by the Supreme Court January 6, 1936, and the International Agreement proved ineffective because it did not obtain the full cooperation of all of the principal exporting countries. This may have been due in part to smaller crops harvested in several of the major exporting countries during the 3 years following the signing of the agreement. Production was reduced by drought to such an extent as to alleviate the surplus problem, and prices rose to a point where many countries considered price supporting through acreage curtailment or market allocation unnecessary. In all fairness, it should be admitted that in a number of the wheat-exporting countries there is no alternative enterprise, and these countries have been forced to continue wheat production and make it as profitable as possible. With the return to more normal yields per acre, particularly in the Northern Hemisphere, the world surplus of wheat has once again become a pressing problem, and average yields on the present world acreage will continue to produce a crop greatly in excess of world needs. This problem is expected to receive the attention of the International Wheat Committee when it next convenes.

Faced with continued large export surpluses and a declining export outlet, practically all of the exporting countries have taken steps to obtain as large a share as possible of the curtailed import markets. Measures adopted include subsidies to growers, export bounties, currency depreciation, bargaining tariffs, and special agreements of a barter or clearing nature. Many of these special agreements have been tempered by political considerations.

Methods employed by exporting countries in promoting wheat exports vary considerably. Each of the important countries or groups of countries will therefore be considered separately. It is interesting to note, however, that measures taken by exporting countries have in general evolved toward government control as the most effective device, although such control has not been as rigid as in importing countries.

It is also of interest to note that, although, practically all importing countries have for years had authority to impose antidumping measures, there has been little or no inclination for them to apply these measures. So far, export aids have resulted from, rather than caused, increased import barriers. As a matter of fact, the growth of quantitative restrictions on imports has made the application of antidumping measures unnecessary.

Danube Basin Countries

The four surplus wheat-producing countries of the Danube Basin - Hungary, Rumania, Yugoslavia, and Bulgaria - have experimented with various forms of aid to wheat growers since early in the depression. Such aids have included fixed prices, export bounties, foreign-exchange control, and various forms of the two-price system.

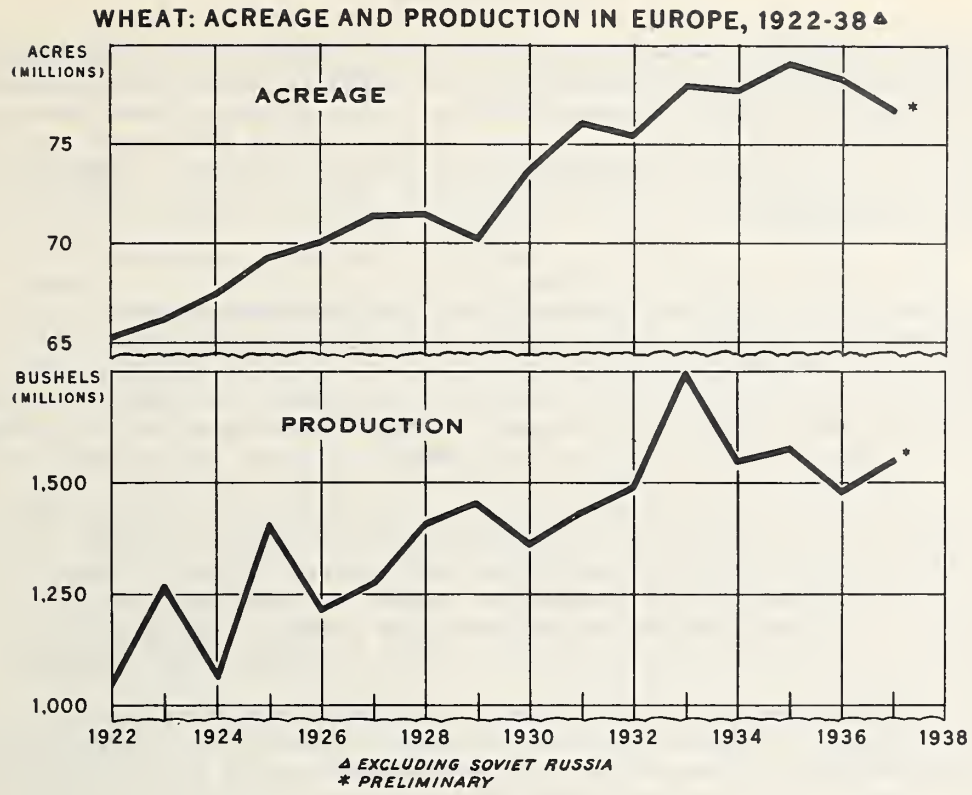
WHEAT: ACREAGE AND PRODUCTION IN EUROPE, 1922-38△
ACRES (MILLIONS)
ACREAGE
75
70
65
BUSHELS (MILLIONS)
PRODUCTION
1,500
1,250
1,000
1922
1924
1926
1928
1930
1932
1934
1936
1938
△ EXCLUDING SOVIET RUSSIA
* PRELIMINARY
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Fig. 1.

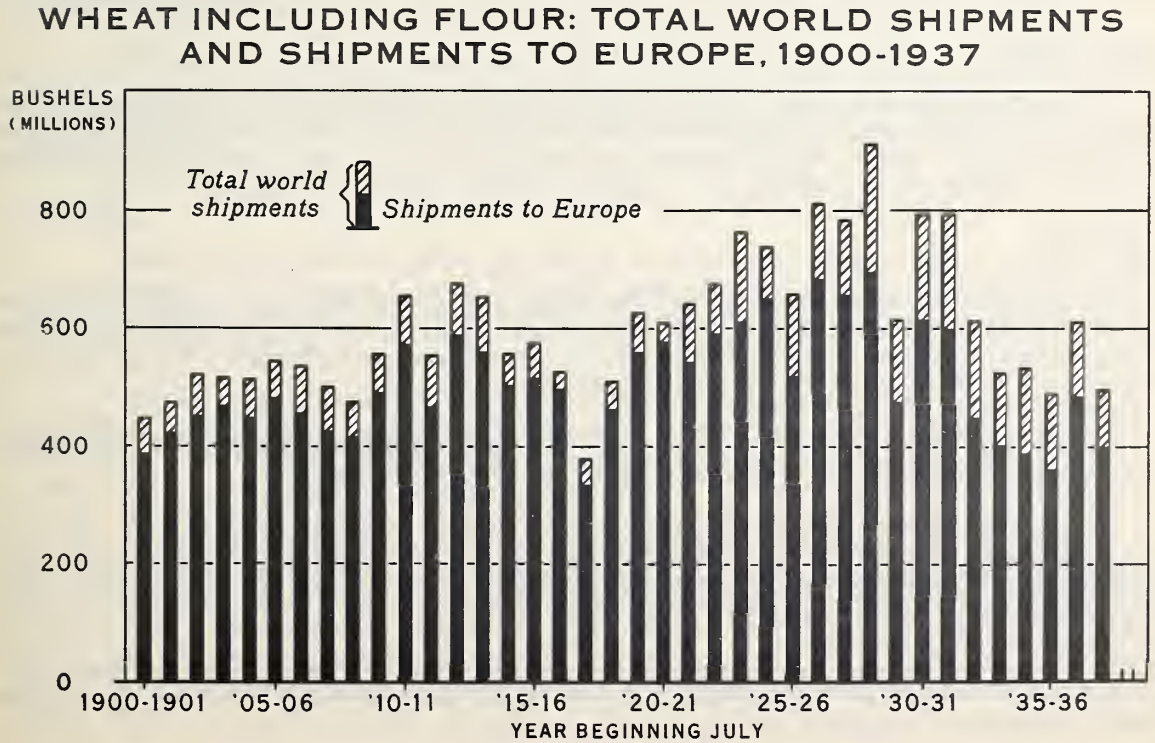
WHEAT INCLUDING FLOUR: TOTAL WORLD SHIPMENTS AND SHIPMENTS TO EUROPE, 1900-1937
BUSHELS (MILLIONS)
Total world shipments
Shipments to Europe
800
600
400
200
0
1900-1901
'05-06
'10-11
'15-16
'20-21
'25-26
'30-31
'35-36
YEAR BEGINNING JULY
U. S. DEPARTMENT OF AGRICULTURE
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Fig. 2.

The evolution of Government aid in these countries has finally resulted in complete Government control of wheat exports. While the measures utilized have had varying degrees of success, the most effective means of moving wheat into export has proved to be bilateral treaties or agreements with certain wheat-importing countries of Europe, particularly Germany, Italy, and Austria. Political rapprochement, as well as economic considerations, has played an important part in the development of this type of agreement.

Under these agreements, the wheat-exporting countries of the Danube Basin obligate themselves to exchange their wheat for the industrial products of the country to which the wheat is sold. One of the most serious disadvantages of this method of selling is that the wheat-exporting countries are unable to obtain any free foreign exchange and are therefore unable to expand their trade with other countries. As a result, there was a tendency on the part of the Danube countries to get away from this barter form of trade in 1936 and 1937, when world wheat prices rose sufficiently to make it profitable to sell wheat to countries, such as the United Kingdom, where there were no restrictions on the use of foreign exchange. With the return of low prices this year, however, most of the wheat from the Danube countries is being sold under bilateral agreements, as the prices of industrial products taken in exchange for wheat are adjusted in such a way as to permit the sale of wheat at prices above world levels. Thus we find the unusual situation of wheat-importing countries cooperating in the maintenance of wheat prices in the wheat-exporting countries.

As Germany and Italy are anxious to decrease their dependence on overseas supplies of wheat, it is expected that bilateral agreements will continue to be the primary method used in disposing of the surplus wheat of the Danube countries. This means, of course, that the import demand for United States wheat, and for that matter other overseas wheat, is reduced by the amount of the surplus available in the Danube exporting countries. In other words; regardless of price, Germany and Italy will continue to take practically all of the surplus wheat of the Danube countries.

Soviet Union

In the Soviet Union, trade in wheat is under complete Government control, and exports are determined as much by Government policy as by the size of the crop. In the past several years, the Government has demonstrated its willingness to sell wheat at prices competitive with those at which any other wheat is offered.

Argentina

As far back as November 1933, the Argentine Government established a minimum price for wheat and created a Grain Regulating Board, whose duties were to purchase wheat at fixed prices whenever world prices, as reflected in Buenos Aires, fell below the minimum established by the Government.

An equally important move, which was made at the same time, was the taking over by the Government of complete control of foreign exchange.

One reason for foreign-exchange control was to provide profits with which to finance losses incurred by selling grain for export at less than fixed prices. The Government obtains these profits by buying export bills at one rate and selling foreign exchange to importers at a higher rate.

A second reason for exchange control was that it enabled the Government to give greater stability to the value of the Argentine currency. During the periods when agricultural exports are large, the tendency is for the value of the currency

to strengthen and, in the long run, discourage exports. Much of the Government's effort in recent years, therefore, has been devoted to keeping the value of the currency from rising unduly in order not to discourage agricultural exports.

Finally, foreign-exchange control provided the Argentine Government with a means of influencing its import purchases. Argentina has encouraged imports from those countries that are the best customers for Argentine agricultural exports and with which it normally has an active balance of trade.

While the Government fixes prices to producers of wheat, it does not attempt directly to regulate prices of wheat on the domestic market. During periods when fixed prices are above world levels, however, the natural effect is to force buyers of wheat for domestic consumption to pay at least the fixed price. Since the wheat purchased by the Grain Board is sold for export at existing world prices, Argentina in effect maintains a two-price system.

During the first year of its existence, 1933-34, the fixed price was well above world levels and the Grain Board found it necessary to purchase large quantities of wheat. Late in that year and in the several years following, however, world prices rose and the Board was able to dispose of its purchases with only a slight loss. Minimum prices for wheat were suspended in December 1936. The low prices now obtaining for wheat, however, have caused considerable pressure to be brought to bear on the Argentine Government to set a minimum price for the coming harvest. On September 30, the Chamber of Deputies passed a bill authorizing the President "to fix minimum prices for wheat, linseed, and maize, or to grant subsidies to producers of those cereals in such a manner and by such means as it considered proper." The bill provides that the Government, in establishing prices, shall take into consideration the cost of production. It further provides that the losses incurred in subsidizing exports of the above cereals shall be paid from the profits on foreign exchange and that, if these are not sufficient, additional funds shall be advanced by the National Bank.

The point at which prices will be fixed is not yet known. It can be anticipated, however, that the powers granted the Grain Regulating Board, together with accumulated exchange profits, will be used actively to move Argentine wheat into export markets.

Australia

While there has been much agitation on the part of Australian wheat growers for Government assistance, direct export aids for wheat have never been employed. The Government, however, has paid bounties and made direct grants to wheat producers in most years since 1931.

In the case of wheat flour, however, there appears to be a two-price system in effect, under which sales on the domestic market are made at prices higher than those for export wheat. This has been carried out under an agreement between millers with the tacit consent of the Government.

In recent months there has been considerable agitation for permanent stabilization of the wheat industry through State and Federal cooperation. A scheme under discussion is the establishment of a home consumption price for wheat to be financed by a Commonwealth excise tax on flour - the grower to receive a minimum price for all wheat consumed domestically. Before this scheme is put into effect, however, it will require legislation by all the States as well as by the Commonwealth Government.

One objection to such a scheme is that a high percentage of the wheat crop is exported so that, if the export price were competitive, a heavy burden would be placed on the domestic consumer.

Canada

During the early years of the depression, Canada experimented with various methods of aid to wheat producers, including the use of voluntary marketing pools, Government guaranty of bank loans to wheat pools, and direct purchases of wheat for Government account. In 1931-32, wheat producers received a bounty of 5 cents per bushel. The various measures taken, however, failed to solve the problem, and in fact created an additional problem in the form of accumulation of surpluses.

General dissatisfaction with the previous policies resulted in the passage of the Canadian Wheat Board Act in July 1935. This act provides for direct Government control of wheat marketing. The outstanding provision is fixed minimum prices to growers. In addition, however, the Board is empowered to direct export sales and control grain elevators and regulate their relations with transportation agencies. In short, the Board is authorized to use all the usual marketing channels or to create its own machinery if necessary.

Producers are not compelled to sell their wheat to the Board, but only by so doing are they assured of receiving at least the guaranteed price. If the Board is eventually able to dispose of the wheat at more than the minimum price, the participating producers are entitled to a share of the excess. Wherever the Board incurs losses in selling wheat below prices paid to producers, the loss becomes a direct charge on the National Treasury.

During the first few months of the Board's operation, the principle of holding wheat from the market to support prices was continued. Late in 1935 a very significant change in policy was inaugurated. Emphasis was placed on moving wheat into export channels rather than permitting the accumulation of stocks. For the 1935-36 season, the basic price established was 87.5 cents per bushel for No. 1 Northern Spring wheat at Fort William-Port Arthur. Shortly after the beginning of that season, however, world wheat prices rose above the minimum price set by the Board and remained there during the next two marketing seasons. As a result, it was unnecessary for the Board to take title to any considerable quantity of wheat, and during this period it was able to dispose of the surpluses it had inherited under the act of 1935.

During the current marketing season, world prices of wheat declined to the lowest level in several years, and on August 5, 1938, the Canadian Wheat Board announced that the minimum price to growers for the 1938-39 crop would be 80 cents per bushel for No. 1 Northern wheat at Fort William-Port Arthur. Prices for lower grades are at proportional discounts. This means a price to growers averaging from 55 to 60 cents per bushel for all grades and classes.

As the minimum prices are about 20 cents above market prices, the Board has been compelled to take all offerings. Under the present price relationship, therefore, it takes on the semblance of a monopoly.

Despite the rather large losses involved, the Board has sold wheat freely; but most of the sales have been made to the United Kingdom, where Canadian wheat enjoys a 6-cent tariff preferential as compared with United States wheat.

The handling of wheat has been conducted through regular trade channels with the Board operating as the sole purchaser from growers and the sole seller to the

trade for either domestic or export purposes. This brings up an interesting point of difference between the Canadian and other schemes. Canada is the only major exporting country in which wheat is sold at prices no higher for domestic use than for export.

As the Canadian scheme now operates, the Wheat Board determines the amount of wheat it will offer for sale on the Winnipeg exchange each day. With this knowledge, grain operators offer what they think market conditions justify. Thus, for any one day the Wheat Board has little or no control over prices, though it is presumed they would stop sales if prices offered were considered unduly low.

Canada appears to have a very effective means of disposing of its wheat surplus in the export market; and, so long as the Wheat Board continues its free selling policy, it can be anticipated that a very substantial volume of Canadian wheat will move into export. An added advantage is that strong Canadian wheat is preferred by many of the importing countries even though the price is somewhat higher than that at which weaker wheats, such as our hard winter wheat, can be obtained. On the other hand, the cost of the current program to the Canadian Government will be very high this year and if continued in future years may create considerable opposition on the part of taxpayers.

United States

The history of relief for wheat producers in the United States does not differ materially from that in Canada, although greater emphasis has been placed upon the desirability of withholding supplies from the market and curtailing acreage in order to bolster prices. The first large-scale operations of this nature were conducted by the Farm Board and resulted in large losses, due primarily to several years of large world wheat crops.

Largely as a result of drought-reduced crops from 1934 through 1936, the carry-over of wheat in the United States was reduced to about normal proportions. During this period, however, supplies of Pacific Northwest white wheat continued to be excessive, and the Government took various steps to assist growers in that section of the country. The first of these was the organization of the North Pacific Emergency Export Association which operated in 1933-34. This Association was required, under the terms of a marketing agreement with producers, exporters, and millers in Washington, Oregon, and northern Idaho, to facilitate the export of surplus wheat from that region. Payments at the rate of approximately 23 cents per bushel were made on over 28 million bushels, about three-fourths of which was sold in the form of wheat and one-fourth in the form of flour.

The second step was the subsidization of exports of Pacific Northwest wheat flour to the Philippines. This program has been in effect since March 5, 1936. It has been justified on the grounds that we should regain our share of Philippine imports of flour, which had declined from 81 percent during the years 1925-1933 to only about 23.5 percent in 1935 and 1936. The program was authorized by Clause 1, Section 2, of the Agricultural Adjustment Act.

Under this program, indemnities are paid to millers for flour milled from Pacific Northwest wheat and exported to the Philippines. Indemnities are based on daily compilations of the difference between the cost of a barrel of Pacific Northwest Export Straight flour, c.i.f. Manila, and quotations for competitive flour, c.i.f. Manila, duty paid. The program has been successful in regaining for the United States a large share of the Philippine flour market, with the United States currently supplying better than 60 percent of Philippine flour imports.

Broader export program introduced in 1938 - With the harvesting of a near-record wheat crop in the United States in 1938, together with a very large world crop, it became apparent that a broader program for promoting exports would be necessary if the United States were to maintain its former share of the world market. On August 29, the Department of Agriculture announced an export-sales policy for wheat and flour for the current marketing season. Under the wheat-export program, the Federal Surplus Commodities Corporation purchases wheat from both dealers and producers. Since these purchases are for export, they are confined to those classes and grades suitable for export.

Exporters of wheat are then invited to make offers to buy, for export, wheat held by the Corporation, and to specify the classes and grades desirable and the prices they will pay. These offers are then examined and, if considered reasonable in the light of competitive factors, the wheat is sold. Thus the export trade is conducted through regular trade channels. It is important to note, however, that the United States system provides for approval of each individual offer and thereby permits a greater control of prices than do the schemes in effect in Canada and other major exporting countries.

The program is financed through the establishment of a Revolving Fund secured through a loan from the Reconstruction Finance Corporation. Any losses resulting from the difference between purchase and sale prices for wheat are met from funds made available under Section 32, Public No. 320, as amended, which act authorizes the Secretary of Agriculture to use 30 percent of the annual customs receipts for stipulated purposes. These include encouragement of export trade, as well as domestic consumption, of agricultural commodities.

Although similar in its objective to the wheat-export program, the flour-export program differs somewhat in its operation. Payments are made to exporters based on the difference between the domestic price of flour and prices in foreign markets at the time of sale. Because of fluctuations in the price of flour in the principal world markets and because of the many varieties and grades of American wheat used in making flour, the formula on which such payments are made is not rigid.

Efforts to adjust production - In addition to these export aids, United States wheat producers have for several years received additional assistance from the Government. Such assistance was largely in the form of payments for adjusting acreage.

Growers who cooperated under the Agricultural Adjustment programs of the past several years have received adjustment or benefit payments. For the crop years 1933-34 and 1934-35, such payments amounted to 29 cents per bushel and in 1935-36, to 33 cents per bushel. They were made on the "domestic allotment," which was placed at 54 percent of the base production, representing the estimated proportion of the total production milled for human consumption. A payment of 21 cents per bushel on the "domestic allotment" was also made to those producers of winter wheat who had complied with the 1936 provisions of the program as of January 6, 1936, the date on which the production-control features of the act were invalidated by the Supreme Court.

Under the 1936 and 1937 conservation programs, farmers received a specified amount for each acre diverted from soil-depleting to soil-conserving crops, but no reduction in actual wheat acreage was called for. Under the new Agricultural Adjustment Act of 1938, wheat allotments were established for 1938 and 1939. Because this act was not passed until after winter wheat for harvest in 1938 had been sown, the allotment for 1938 was used only for computing payments.

Producers who have complied with the Agricultural Adjustment program of 1938 are eligible to a loan on their wheat, which for the United States as a whole averages around 60 cents per bushel at the farm. In addition, cooperators in 1938 will receive a payment of 12 cents per bushel on the normal production of wheat on their allotted acreage. For 1939, this payment will range between 16 and 18 cents per bushel. The amount of payment is determined on the basis of (1) acreage, (2) value, (3) acreage diverted, and (4) value of the "normal production" of the acreage diverted. The larger payments for 1939 are due to the relatively larger acreage diversion called for.

In addition to payments under the Soil Conservation and Domestic Allotment Acts, the Price Adjustment Act of 1938 provides for additional payments of from 10 to 12 cents per bushel to producers who have kept within their 1939 wheat-acreage allotments. Such payments will be made on normal production on the allotted acreage.

COMPARISON OF EXPORT PROGRAMS IN MAJOR EXPORTING COUNTRIES

The wheat- and flour-export programs now in effect in the United States are similar to the wheat-export programs in effect in Canada and Argentina and the flour-export program in Australia in that all of these schemes permit the sale of wheat abroad at prices lower than those received by the producers. One essential difference, however, is that the United States scheme, as announced, is confined to a total export of wheat and wheat flour equivalent to approximately 100 million bushels, whereas the schemes in the other exporting countries apply to all wheat and wheat-flour exports made during the current marketing season. The limitation of the United States scheme to a quantity of 100 million bushels has been made on the assumption that this amount represents roughly the normal percentual share for the United States of world import needs this year.

There is another important difference in the methods used by the four major exporting countries. In Canada, for example, sales of wheat for export and for domestic consumption are made at the same prices, the Government making good the difference between these prices and the price paid producers. In the United States and Argentina, on the other hand, a two-price system prevails, under which sales for domestic use are made at prices considerably higher than those for export wheat. In Australia, a two-price system prevails for wheat flour only.

CONCLUSION

In conclusion, it may be said that the measures adopted by importing countries have for the most part been successful in maintaining domestic wheat prices. They have also been of primary importance in expanding wheat production in these countries. On the other hand, either by raising prices unduly or by reducing the quality of the bread, they have brought about a decrease in bread consumption. They have also contributed to the low world wheat prices prevailing in recent years by widening the spread between duty-paid prices in importing countries and prices received by exporting countries. The practice of some of the normally importing countries of subsidizing exports of soft wheat in order to replace them by imports of hard (strong) wheats has also contributed to the lowering of world wheat prices.

In addition, the methods employed by importing countries have brought about a more careful selection of purchases, and an increasingly larger proportion of imports have consisted of strong wheats. This practice has tended to favor purchases of the hard spring wheats of Canada and the Soviet Union, and, together with the policy of several European importing countries of obtaining their wheat from nearby countries under barter or clearing agreements, has made it more and more difficult to dispose of United States wheat in export markets.

Exporting countries have been forced to adopt measures designed both to move their wheat over import barriers and to meet the increasing competition from other exporting countries for the curtailed import demand. There has been a universal adoption by exporting countries of export subsidies or equivalent measures. To some extent at least, these export subsidies represent payment by exporting countries of the duties imposed by importing countries. With one or two exceptions, some form of two-price system now exists in all exporting countries. In some, effective use is made of manipulation of foreign exchange in order to keep internal prices at satisfactory levels and still make wheat available for export at competitive prices.

To the extent that two-price systems increase domestic bread prices, they place an added burden on consumers. Furthermore, the cost of the various forms of aid financed from taxes must be shared by consumers. In determining the net effect on consumers, however, consideration must be given to increased industrial activity and higher national income resulting from greater prosperity of the farmer.

The various measures adopted by exporting countries have resulted in more and more government interference or control, and there is hardly any country at the present time in which wheat for export does not at some time or other pass through the hands of government agencies. In some countries, the government has taken over complete control of the grain trade, but in the major exporting countries marketing is still accomplished through regular trade channels.

Finally, it should be pointed out that there is no disposition on the part of importing countries to reduce wheat acreage. Except in years of unfavorable weather, therefore, production will be maintained at current levels. This means that exporting countries must divide among them an import market absorbing only about 500 million bushels of wheat a year compared with 750 million bushels in the years 1925-1929.

THE MARKET FOR AMERICAN TOBACCO IN THE SCANDINAVIAN AND BALTIC COUNTRIES . . .

By P. G. Minneman*

Consumption of United States leaf tobacco is generally increasing in the Scandinavian and Baltic areas, whereas in most of continental Europe it has registered a decline during the past 10 years. Two factors largely account for the gain; namely, the heavy increase in cigarette consumption during the postwar period, and the distinct shift from cigarettes made from oriental leaf to blends containing American leaf. This study comprises a detailed analysis of the factors influencing the demand for American leaf tobacco in the Scandinavian and Baltic countries, together with a discussion of the outstanding market features in each country. Attention is also devoted to the influence of excise taxes and other fiscal policies of the respective countries on the consumption of tobacco products.

The Scandinavian and Baltic countries constitute an increasingly important market for American leaf tobacco. Indications point to an increased consumption of flue-cured and, to a smaller extent, of Burley, particularly in blended cigarettes. For dark types in smoking mixtures, chewing tobacco, and snuff, the outlook is unfavorable.

Together these seven most northern European countries 1/ in 1937 took about 21 million pounds of American tobacco, valued at more than 5 million dollars. This is more than one-fifth of the total quantity of American tobacco used by all continental European countries and more than that taken by any single continental country with the exception of France, which now takes about the same quantity. These countries take about one-third of total United States exports of Virginia fire-cured, nearly one-fifth of the Burley, one-tenth of the Western fire-cured, and more flue-cured than any single European country except the United Kingdom.

The following tabulation shows the average quantities of tobacco shipped from the United States to the seven countries in 1936 and 1937:

	1,000 pounds
Flue-cured	11,079
Virginia fire-cured	3,431
Western fire-cured	3,732
Burley	1,787
Other types	189
Stems and scrap	1,406
Total	21,624

*Tobacco Specialist, London office, Bureau of Agricultural Economics.

1/ Denmark, Sweden, Norway, Finland, Latvia, Lithuania, and Estonia.

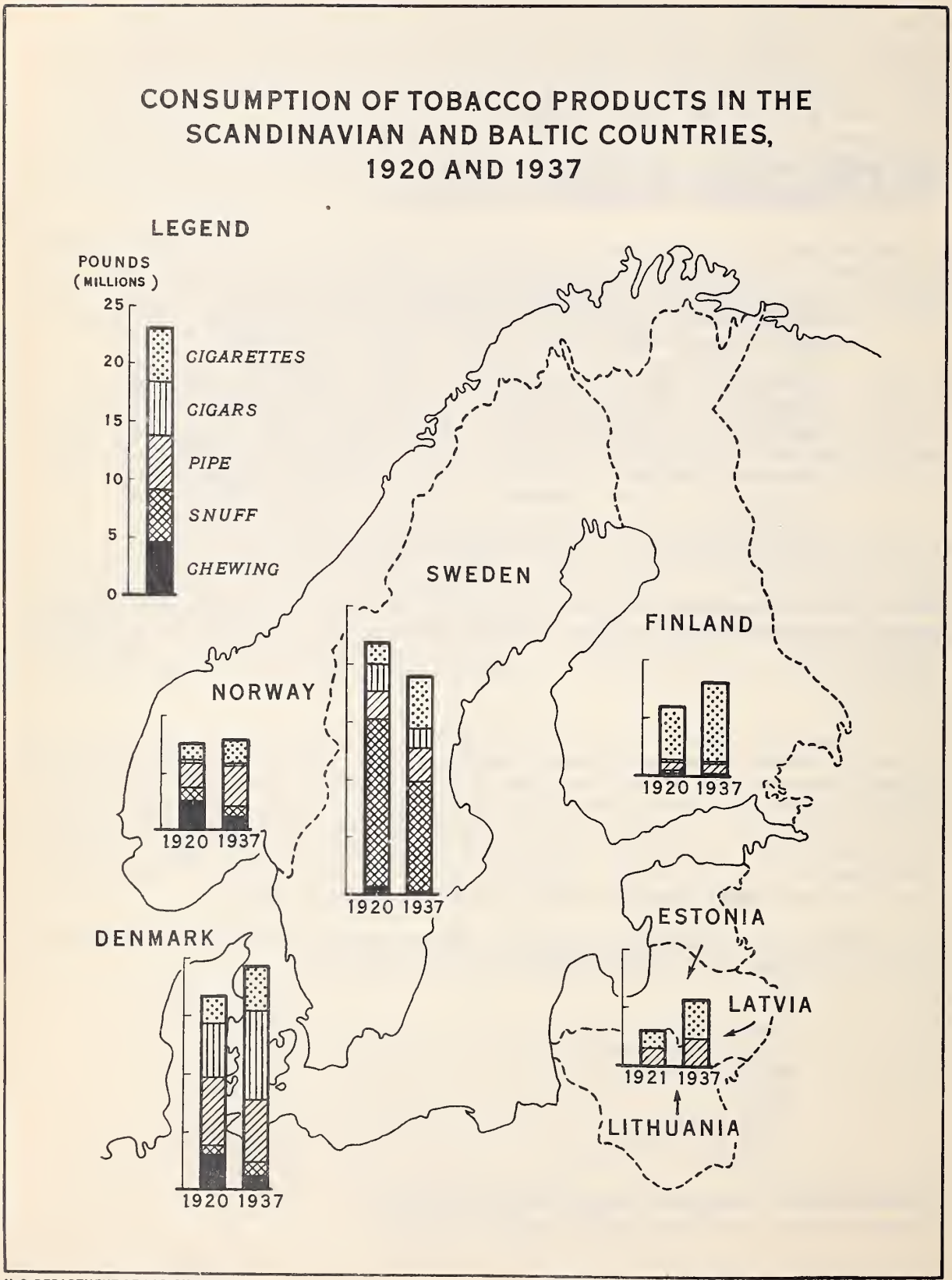
CONSUMPTION OF TOBACCO PRODUCTS IN THE SCANDINAVIAN AND BALTIC COUNTRIES, 1920 AND 1937
LEGEND
POUNDS (MILLIONS)
25
20
15
10
5
0
CIGARETTES
CIGARS
PIPE
SNUFF
CHEWING
SWEDEN
FINLAND
NORWAY
DENMARK
ESTONIA
LATVIA
LITHUANIA
1920 1937
1920 1937
1920 1937
1920 1937
1921 1937
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Fig. 1.

The consumption of American leaf is generally increasing in these countries, whereas in most other continental European countries it has lost ground during the past 10 years. Another favorable factor is that foreign trade is somewhat less restricted by nationalistic self-sufficiency policies than in many European countries. Although small quantities of tobacco are grown in each, the climate and soil are unsuitable and the total home-grown crop amounts to only about 2.25 million pounds, or less than 5 percent of total requirements. Furthermore, much of the home-grown leaf is consumed by the growers without being manufactured. Over 95 percent of the total leaf requirements, therefore, are imported.

About 41 percent of leaf imports are from the United States (table 1); 33 percent is oriental-type leaf from Greece, Turkey, Bulgaria, and the Soviet Union; and about 24 percent is cigar leaf largely from Sumatra, Java, and Brazil. The remaining 2 percent consists of miscellaneous types from all parts of the world - the Far East, India, South Africa, and South America.

Formerly a high proportion of the business in American leaf was handled by dealers in these countries, but now only a small proportion is thus handled. Most of the American tobacco is purchased by manufacturers either direct from their leaf buyers in the United States or through the local agents of American exporters. The Swedish Monopoly buys its supply of American leaf almost entirely through its own office in Richmond, Virginia. In some of the Baltic States (and until recently in Denmark), the import-control regulations limiting funds available for the purchase of tobacco have tended to limit imports to the quantities necessary to fill manufacturers' direct needs, and this has operated further to restrict importations by dealers for their own account.

By far the greater part of the American tobacco imported into the Scandinavian countries is now shipped direct from the United States, but much of that used in the Baltic States is reshipped from Copenhagen, Bremen, and Hamburg. Before the war, most of the American tobacco imported by the Scandinavian countries was reshipped from continental ports. Most of the imports during the war were made direct or through Copenhagen. Since the war, some of the Copenhagen reshipping trade has returned to Bremen and Hamburg, which are in a more favorable geographical position; but direct shipments continue to increase.

Table 1. Net imports of tobacco into the Scandinavian and Baltic countries and proportion from the United States, approximate 1937 level [a/]

Country	Total	From the United States	
		Quantity	Percentage
	1,000 pounds	1,000 pounds	Percent
Denmark	17,846	5,523	30.9
Sweden	13,205	7,923	60.0
Norway	6,327	4,916	77.7
Finland	8,025	1,411	17.6
Estonia	1,550	229	14.8
Latvia	2,403	662	27.5
Lithuania	1,722	551	32.0
Total	51,078	21,215	41.5
Other continental European countries	449,738	77,822	17.3

a/ Unmanufactured tobacco, including stems.

The manufacture of tobacco in these countries is conducted by private companies except in Sweden, where it has been in the hands of a Government Monopoly since

1914. A further exception is in Estonia, where the ownership of one of the factories was taken over by the Government in 1937. With the exception of the monopoly in Sweden, manufacturing in most of these countries is in the hands of four or five relatively large companies and numerous small companies. The number of smaller factories is particularly large in Denmark, where a large proportion of the products consists of cigars, the manufacture of which is conducive to small enterprises. It is reported that there are 400 small Danish "manufacturers" who employ no help outside the family but whose combined output amounts to only about 5 percent of the nation's total.

The principal factors affecting the market for American tobacco in these countries have the following similarities, which make it expedient to duscuss them first as a group:

Consumption habits of the people in these countries have much in common;
Consumption of cigarettes and of flue-cured tobacco is generally increasing;
Very little home-grown tobacco is produced in any of the countries;
Relatively large proportions of imports come from the United States, especially of types other than oriental and cigar leaf;
Trade relations with the United States are good, although the bilateral balance of trade is generally unfavorable to them;
Only small stocks of American tobacco are normally carried in these countries;
The channels through which the leaf supply is obtained are generally similar.

The market in each country, however, has distinctive characteristics, which will be discussed separately in the latter part of the report. These include the monopoly control in Sweden, as contrasted with private operation in the other countries, and the relative importance of the several tobacco products, such as the importance of cigar consumption in Denmark, of chewing tobacco in both Norway and Denmark, and of snuff in Sweden. In Finland and the other Baltic countries, cigarettes are the most important product. A further interesting factor is the popularity of mouthpiece cigarettes (*papirosi*) in Sweden and the Baltic countries. This has an important bearing on tobacco requirements, because *papirosi* usually contain less than half as much tobacco as other cigarettes and are made predominantly from oriental-type leaf.

With these important points of similarity and difference in mind, the countries will be treated first as a group; later the most important considerations in each country will be discussed separately.

CONSUMPTION INCREASING

The total consumption of tobacco products in these seven countries in 1937 amounted to 60.1 million pounds, a record high level compared with 56.7 million pounds during the preceding period of prosperity in 1929 and 1930. During the depression in 1932 and 1933, consumption declined to 51.6 million pounds, but has been rising steadily since then.

Table 2 shows the quantities of tobacco consumed annually in each country during the periods of depression and prosperity since 1921 (figure 1). The weight of products consumed, however, does not fully reflect the amount of the increase because changes have taken place in the type of products. The proportion of cigarettes and cigars has increased, whereas snuff and chewing tobacco, which formerly

made up nearly one-half of the total consumption, now account for only one-fourth. The weight of the latter two products is several times that of the leaf used in their manufacture and unduly affect consumption data. Total leaf requirements, therefore, have increased more rapidly than the total weight of the products. Whereas the total weight of products consumed in 1937 was only 6 percent greater than in 1929-1930, or about 25 percent above 1921-1922, the actual consumption of leaf tobacco, as shown by the net imports of unmanufactured tobacco (table 2), has increased by more than 15 percent since 1929-1930 and by approximately 52 percent since 1921. In the period 1922 to 1925, the total weight of all products manufactured was about 40 percent greater than the weight of unmanufactured tobacco imported, whereas during the past 5 years, 1933 to 1937, the weight of the products was only 15 percent greater than the weight of the tobacco imported. This change was due largely to the smaller proportion of snuff and chewing tobacco.

Table 2. Scandinavian and Baltic consumption of manufactured tobacco products and net imports of unmanufactured tobacco, approximate annual rate, 1937 with comparisons

Country	2-year average [a]			1937, prosperity	Percentage increase or decrease 1937 from 1929-1930
	1921-1925, post-war depression	1929-1932, prosperity	1931-1934, depression		
	Million pounds	Million pounds	Million pounds	Million pounds	Percent
Consumption of manufactured products -					
Denmark	14.0	16.2	16.1	19.3	+19
Sweden	17.9	18.1	17.8	19.0	+5
Norway	7.2	7.2	6.6	8.0	+11
Finland	5.0	8.2	6.2	8.1	-1
Baltic States [b]	3.6	7.0	4.9	5.7	-19
Total	47.7	56.7	51.6	60.1	+6
Net imports of unmanufactured tobacco -					
Denmark	10.0	13.5	15.3	18.1	+34
Sweden	10.6	13.7	12.0	16.7	+22
Norway	5.3	5.5	5.0	6.4	+16
Finland	5.0	8.1	5.5	7.9	-2
Baltic States	5.3	7.1	5.0	6.1	-14
Total	36.2	47.9	42.8	55.2	+15

[a] Depression and prosperity periods do not coincide exactly in each country; consumption data for each country cover the highest and lowest 2-year periods in the cycles.

[b] Estonia, Latvia, and Lithuania.

Shifts in Types of Products

In these countries as a group, cigarettes are now the most important single product and in 1937 accounted for about 35 percent of total consumption. Cut tobacco, largely for pipes, accounted for 25 percent, snuff for 20 percent, cigars and cigarillos for 15 percent, and chewing tobacco for 5 percent.

Consumption habits in these countries have undergone a distinct and far-reaching change. There has been a long-time shift from chewing tobacco and snuff to cigarettes (figure 2). Before the war, cigarettes were relatively unimportant, probably making up less than 10 percent of the total consumption. By 1920, cigarette consumption had more than doubled, and by 1937 had doubled again (table 3).

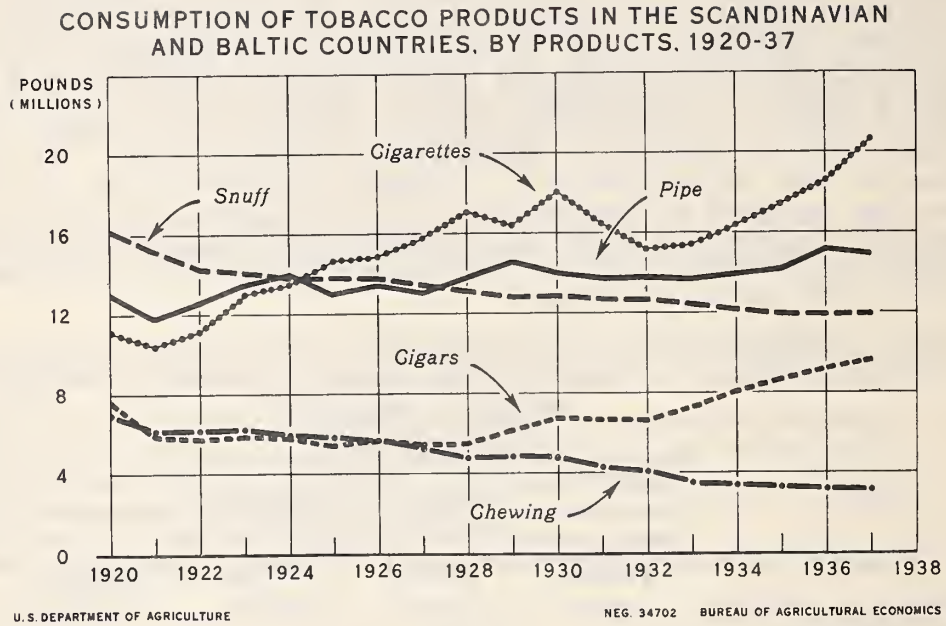

Fig. 2.

Since 1920, the consumption of snuff has declined 20 percent and that of chewing tobacco 50 percent. Young people, especially, prefer the relatively mild and convenient cigarettes to other tobacco products. The increased use of cigarettes by women has also been an important factor.

Pipe smoking has increased at about as rapid a rate as the increase in total consumption and has held its relative position of about 25 percent of the total. Cigars and cigarillos are relatively unimportant except in Denmark, where their consumption has increased materially since 1921. This increase has been particularly stimulated by the Government policy of lower taxation on cigars and cigarillos.

Table 3. Consumption of tobacco products in the Scandinavian and Baltic countries, 1937, with comparisons

Product	Quantity				Percentage distribution			
	2-year average during [a]			1937	2-year average during [a]			1937
	1921-1925	1929-1932	1931-1934		1921-1925	1929-1932	1931-1934	
	Million pounds	Million pounds	Million pounds	Million pounds	Percent	Percent	Percent	Percent
Cigarettes	10	17	15	21	21	30	29	35
Cigars [b]	5	7	7	9	10	13	14	15
Smoking tobacco	12	14	13	15	25	25	25	25
Snuff	15	13	12	12	31	23	24	20
Chewing	6	5	4	3	13	9	8	5
Total	48	56	51	60	100	100	100	100

a/ Depression and prosperity periods do not coincide exactly in each country; consumption data for each country cover the highest and lowest 2-year periods in the cycles.

b/ Including cigarillos.

Per-Capita Consumption Varies Widely

Together, these countries have a population of about 22.3 million and a per-capita consumption of 2.69 pounds of tobacco products annually (table 4). This is not so high as in most other European countries and the United States. Per-capita consumption varies widely among the countries, depending largely upon the type of product that predominates. Denmark has the highest total per-capita consumption, 5.15 pounds, partly because consumption is largely in the form of cigars, which require relatively larger quantities of tobacco compared with the small, light-weight, mouthpiece cigarettes, *papirosi*, which predominate in Finland and the Baltic States. The importance of this factor upon the quantity of tobacco consumed is apparent from the fact that cigars weigh more than 12 pounds per thousand compared with only about 1.17 pounds per thousand of the *papirosi*.

The outstanding features of the consumption habits in each of the countries are briefly outlined. Denmark is outstanding for its high per-capita consumption of cigars, in Europe being second only to the Netherlands. Norway consumes largely pipe tobacco, but at the same time has the highest chewing-tobacco consumption in Europe. Sweden is noted for its snuff, per-capita consumption of which is more than five times that of any other European country. In Finland and the Baltic States, cigarettes overshadow all other products, and the only other product of any importance is pipe tobacco. Cigarettes make up about 85 percent of total consumption in Finland, where the per-capita consumption of cigarettes is one of the highest in continental Europe. The relatively low per-capita consumption indicated in the Baltic States may be attributed partly to the fact that their mouthpiece cigarettes weigh only about one-half as much as other cigarettes and partly to the fact that considerable quantities of low-grade, home-grown leaf are used direct by farmers without being manufactured or taxed.

In order to examine the effect of the shifts in consumption upon the market for United States leaf, it is necessary to examine each of the products separately and to determine the extent to which United States leaf enters into its manufacture.

Table 4. Per-capita consumption of tobacco products in the Scandinavian and Baltic countries, 1937

Country	Cigarettes	Cigars a/	Pipe tobacco b/	Snuff	Chewing tobacco	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Denmark.....	1.02	2.02	1.43	0.29	0.39	5.15
Sweden.....	.73	.25	.47	1.55	.03	3.03
Norway.....	.73	.08	1.15	.33	.49	2.78
Finland.....	1.79	.06	.23	.04	.01	2.13
Baltic States.....	.59	.01	.43	-	-	1.03
Average.....	.92	.43	.67	.53	.14	2.69

a/ Including cigarillos.

b/ Including cut tobacco for hand-rolled cigarettes.

Cigarette Types Change

The steady expansion in the popularity of cigarettes brought consumption in these countries as a level of over 20 million pounds in 1937. It is estimated that cigarettes now take about 42 percent of all the leaf tobacco used by manufacturers. Finland is by far the largest user, total as well as per-capita (tables 4 and 5).

CIGARETTE-TYPES: ESTIMATED PERCENTAGE DISTRIBUTION OF ORIENTAL, PURE FLUE-CURED, AND BLENDED TYPES MANUFACTURED, BY WEIGHTS, 1930-37

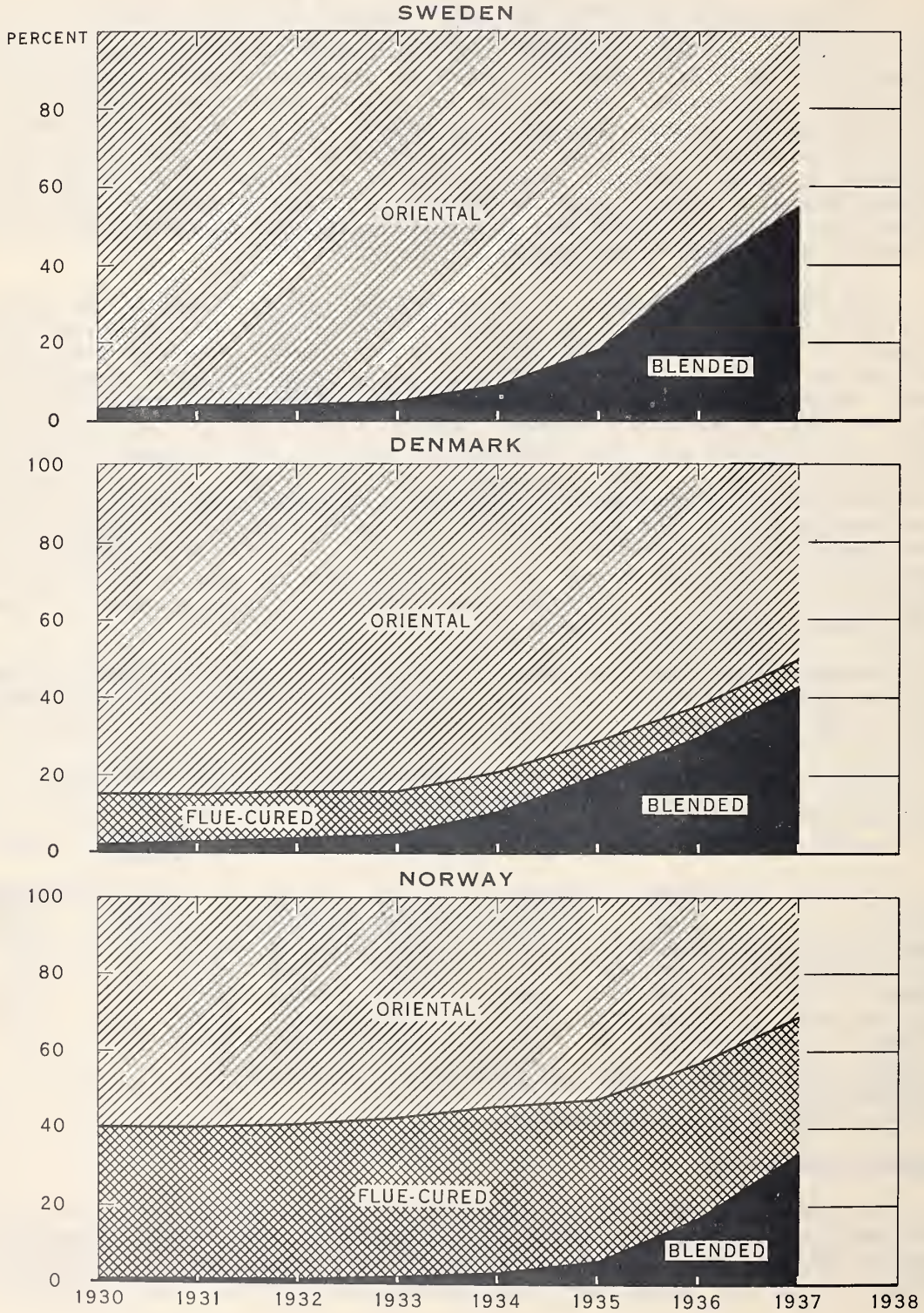

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Fig. 8

In addition to the marked increase in the use of cigarettes, there has been a distinct shift in the type of cigarettes from oriental leaf to blends containing American leaf (figure 3). The types used may be classified into three major groups:

1. Oriental-type cigarettes made primarily from oriental leaf:
   (a) *Papirosi* or Russian-type with cardboard mouthpieces.
   (b) Conventional-type without mouthpieces.
2. American- or blended-type containing flue-cured, Burley, and oriental leaf.
3. English- or Virginia-type containing only flue-cured tobacco.

Oriental-type cigarettes originally predominated in all of these countries. In Denmark and Norway, however, they were of the usual shape without mouthpieces, whereas those in Sweden, Finland, and the Baltic States were almost exclusively of the Russian-type *papirosi* with mouthpieces. From the time cigarettes were first introduced until after the war, Finland and the Baltic States were a part of Russia and obtained their cigarettes largely from Russian factories, which fact may largely account for the use of mouthpiece cigarettes in these countries today.

Table 5. Number of cigarettes manufactured and net weight of tobacco used, 1937 [a/]

Country	Number		Weight per thousand		Total weight		
	Cigarettes	*Papirosi*	Cigarettes	*Papirosi*	Cigarettes	*Papirosi*	Total
	Millions	Millions	Pounds	Pounds	1,000 pounds	1,000 pounds	1,000 pounds
Denmark.....	1,452	[b/]	2.53	-	3,680	[b/]	3,680
Sweden.....	1,534	295	2.66	1.48	4,080	437	4,517
Norway.....	847	0	2.48	-	2,100	0	2,100
Finland.....	1,990	1,983	2.43	1.04	4,830	2,060	6,890
Estonia.....	20	850	2.42	1.18	48	992	1,040
Latvia.....	[b/]	1,186	-	1.18	[b/]	1,410	1,410
Lithuania.....	27	551	2.42	1.43	65	790	855
Total.....	5,870	4,865	-	-	14,803	5,689	20,492

[a/] "Cigarettes" in this table include all without mouthpieces; "*papirosi*" include those with mouthpieces.
[b/] Very small quantities.

The word "papirosi" is the Russian word for "cigarette" and has been adopted to indicate the mouthpiece type. The filled, paper-covered end of the *papirosi* is small and short. To this is affixed an equal or greater length of empty cardboard mouthpiece. [2/]

Papirosi have the distinct economic advantage of requiring a much smaller quantity of tobacco in the manufacture of each cigarette. The filled section of the *papirosi* not only is much shorter, but the diameter is also much smaller. The tobacco is completely consumed in the process of smoking, whereas in ordinary cigarettes, approximately one-third of the tobacco is thrown away unsmoked. *Papirosi* weigh about half as much as ordinary cigarettes, the weights varying from 0.9 to 1.5 pounds of tobacco per thousand *papirosi*, compared with 2.4 to 2.7 pounds for ordinary

[2/] An interesting explanation is advanced for the original popularity of this type of cigarette; namely, that in earlier years, when men wore long beards, the cardboard mouthpiece reduced the danger of burning the smoker's beard. Another reason is said to have been that cigarettes with long mouthpieces could be more easily smoked by persons wearing the customary heavy mittens.

cigarettes (table 5). A slow-burning type of paper is usually used, which permits the cigarette to go out unless smoked rather rapidly. The manufacture of *papirosi* involves two distinct machine operations: first, the preparation of the empty tube of paper and cardboard end, and, second, filling the empty tubes on a different machine. A tuft of cotton to act as a filter is frequently inserted in the cardboard mouthpiece at the end next the tobacco.

During recent years, the use of *papirosi* has declined sharply in Sweden and Finland, but it still far outweighs that of all other types in the Baltic States. In 1929, about 85 percent of the cigarettes consumed in Sweden were *papirosi*, but the proportion declined to 16 percent in 1937. On the basis of weight, the proportion of *papirosi* is even less; about 74 percent in 1929 and less than 10 percent in 1937 (table 5). In Finland, *papirosi* make up about one-half (by number) of total cigarette consumption, and in the Baltic States about 97 percent.

Papirosi are made essentially from oriental-type leaf obtained from Greece, Turkey, Bulgaria and the Soviet Union. No other kind of leaf is used in *papirosi* in Sweden and Finland; in the Baltic States, however, appreciable quantities of American flue-cured leaf are mixed with oriental leaf, especially in the lower-priced brands. The higher-priced brands usually contain no flue-cured leaf, whereas the medium-priced contain from 5 to 10 percent and the lowest-priced, by far the most popular, from 10 to 30 percent.

An important reason for the use of flue-cured in *papirosi* appears to be to reduce the cost in the cheaper brands; consequently, only the cheapest grades of flue-cured leaf are used for such purposes. The average cost per pound of United States flue-cured leaf imported into Finland and the other Baltic countries during recent years has been slightly less than half the cost of oriental-type leaf. Therefore, through increasing the proportion of flue-cured, the cost of cigarettes is reduced. Another reason for the addition of flue-cured in *papirosi* may be to improve the burning qualities of the mixture.

With the shift in consumer taste toward blended cigarettes in the Scandinavian countries, there has been a sharp decline in the use of oriental cigarettes, both *papirosi* and those without mouthpieces. It is estimated that in Denmark and Sweden between 90 and 95 percent of all cigarettes in 1932 were of the oriental type. Five years later, the proportion had declined to about 50 percent of the total. In Norway, oriental-type cigarettes lost ground earlier, and it is estimated that they made up only about 65 percent of total consumption in 1932 and declined to about 30 percent in 1937. The approximate proportions of the several types of cigarettes used in 1937 are shown in table 6.

American-type blended cigarettes have increased most rapidly. Mixtures used in these cigarettes are generally similar to those used in the United States; they contain both oriental and American leaf, but the proportions of the several kinds of leaf vary considerably. The proportion of oriental leaf in the blend is usually greater than in the United States, varying from 25 to 40 percent of the total, whereas the proportion of flue-cured varies from 40 to 50 percent. Burley is used in much smaller proportions, from 10 to 30 percent, and practically no Maryland leaf is used.

English-type, or pure flue-cured, cigarettes are important only in Norway, where they average nearly one-third of total consumption and, to a smaller extent. in Denmark, where they now make up about 7 percent. The relative importance of this type has varied considerably from time to time. Immediately after the war it was far more important than during any other period, partly because of the difficulty in obtaining oriental leaf and partly because of imports of this type from England.

Table 6. Types of cigarettes manufactured in the Scandinavian and Baltic countries, by weight, 1937 [a/]

Country	Quantity				Percentage distribution		
	English	American	Oriental [b/]	Total	English	American	Oriental
	Million pounds	Million pounds	Million pounds	Million pounds	Percent	Percent	Percent
Denmark.....	0.26	1.58	1.84	3.68	7.07	42.93	50.00
Sweden.....	0.00	2.29	2.23	4.52	0.00	50.66	49.34
Norway.....	.70	.77	.63	2.10	33.33	36.67	30.00
Finland.....	.03	.17	[c/] 6.69	6.89	.43	2.47	97.10
Baltic States.	.06	.03	[c/] 3.22	3.31	1.81	.91	97.28
Total.....	1.05	4.84	14.61	20.50	5.12	23.61	71.27

a/ Estimated.

b/ Including *papirosi* and oriental cigarettes without mouthpieces.

c/ Oriental-type also contain proportions of flue-cured leaf.

In calculating the total amount of leaf required annually by the cigarette industry in these countries, it is necessary to take into consideration the loss in weight through the removal of stems or midribs from the flue-cured and Burley leaf. Stems, of course, are not removed from oriental-type leaf. If flue-cured and Burley were stripped clean, stemming losses would approximate from 22 to 24 percent; but not all of the stems are removed in the manufacture of lower-priced cigarettes. Furthermore, in some cases the removed stems are steamed, rolled flat, and used with the leaf. It is estimated that the average net loss through removal of stems from American-type leaf in cigarettes in these countries is about 10 percent. With allowance for this factor according to the situation in each country, estimates have been made of the quantities of the several types of leaf used by cigarette manufacturers (table 7).

Table 7. Estimated quantities of the several kinds of leaf used in cigarette manufacture in the Scandinavian and Baltic countries, 1937

Country	Flue-cured	Burley	Oriental	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Denmark.....	1,257	530	2,315	4,102
Sweden.....	1,542	310	3,050	4,902
Norway.....	1,190	200	880	2,270
Finland.....	970	22	5,720	6,712
Baltic States.....	584	0	2,719	[a/] 3,310
Total.....	5,543	1,062	14,684	21,296

a/ Including small quantity of domestic leaf.

Cigar Consumption Increases in Denmark

The only product other than cigarettes of which there has been any substantial increase in consumption in these countries is cigars, including their miniature edition, cigarillos. The consumption of cigars and cigarillos in 1937 amounted to about 7.6 million pounds, and it is estimated that about 8.8 million pounds of leaf were used in their manufacture. Cigar consumption is important only in Denmark, which alone accounts for nearly four-fifths of the total consumption in these seven countries. Sweden accounts for most of the remainder, very few cigars being used in Norway and Finland and practically none in the Baltic States.

American tobacco growers have little direct interest in the cigar industry, since practically no American leaf is used in the manufacture of cigars in these countries. From the standpoint of the market as a whole, however, they do have an indirect interest because of the shifts in consumption between cigars and other products in which American leaf is used.

The sharp increase in the consumption of cigars and cigarillos since 1928 has been confined to Denmark and has been largely at the expense of increased cigarette consumption in that country. From 1923 to 1928, the consumption of cigars declined in Denmark, while that of cigarettes increased rapidly (table 17). This trend was viewed with disfavor by the Government, because cigarettes, being machine made, replaced considerable labor formerly gainfully employed in the manufacture of cigars. In order to reverse this consumption trend and thereby to increase employment, on December 17, 1928, the excise taxes on cigarettes were increased sharply in relation to cigars and cigarillos. The tax on the most popular low-priced brands of cigarettes was raised from 0.65 crown to 1.40 crowns,[3/] and the selling price was raised from 2.50 crowns to 3.50 crowns per 100 cigarettes. The result was that the consumption of cigars and cigarillos increased more than 35 percent during the next 2 years and by 1937 was two and one-fifth times that in 1928. On the other hand, the consumption of cigarettes fell off 33 percent the first year and by 1937 had not yet regained the 1928 level. It is estimated that the increased taxation on cigarettes relative to cigars has resulted in diverting to cigars at least 2 million pounds of tobacco that would otherwise have gone to cigarettes. On the basis of the present proportion of American leaf in cigarettes in Denmark, this means a loss of nearly 1 million pounds of American-type cigarette leaf.

In many countries, cigars are distinctly a luxury product because of their high price per unit resulting from the relatively large amount of leaf and hand labor required in their manufacture. Through favorable tax treatment, however, cigars and cigarillos are much less of a luxury product in Denmark than in most other countries. The average retail price of cigars in 1936 was equivalent to about 3.3 cents each and of cigarillos 1.6 cents, compared with nearly 1 cent each for cigarettes (table 16).

Another important consideration is the popularity of cigarillos and cigars with women smokers. Nowhere else in Europe has cigar smoking been so widely accepted by women as in Denmark. In other countries, the increased consumption by women in recent years has been in cigarettes.

Since 1930, cigarillos have increased in popularity more rapidly than full-sized cigars. Numerically, nearly as many cigarillos are now smoked in Denmark as cigars, but in terms of weight cigarillos make up little more than one-fourth of the total of cigars and cigarillos. In Sweden, cigarillos are about three times as important as cigars. In order to determine the leaf requirements of the entire cigar industry, it is necessary to combine the weight of cigars and cigarillos. The average weight of cigars in Denmark is estimated at about 12.1 pounds per thousand and in Sweden it is given as 13.7 pounds, whereas the average weight of cigarillos in Denmark is about 5 pounds and in Sweden 5.95 pounds per thousand. The difference between cigars and cigarillos is primarily one of size, since practically the same types of leaf are used in both; the latter, however, contain a greater proportion of small and broken leaves. Cigarillos are machine made, and frequently the filler is coarsely shredded.

It is estimated that nearly 50 percent of the leaf used in cigars and cigarillos in these countries is Netherlands Indian from Sumatra and Java. Most of the

3/ One crown equaled 28.69 cents at the average exchange rate for December 1928.

remainder - about 40 percent of the total - is Brazilian leaf used for fillers, and more than 10 percent is Havana leaf. Wrappers and binders are usually Sumatra - occasionally Havana - on the higher-priced brands and Java on the lower-priced brands. Fillers are usually Brazilian and Java. Allowing for the loss in weight through the removal of stems (it is estimated that about one-fourth of the cigar-leaf stems are rolled and used with the leaf in the cheaper brands), the estimated quantity of leaf used in the manufacture of cigars and cigarillos in 1937 was as follows:

	1,000 pounds
Denmark	8,820
Sweden	1,854
Norway	220
Finland	243
Baltic States	60
Total	11,197

Smoking Tobacco Consumption Steady

Smoking tobacco, largely for pipes, plays an important part in all of these countries but is most important in Denmark and Norway. In the area as a whole, it makes up about one-fourth of total consumption - as much as 42 percent in Norway and as little as 10 percent in Finland.

The importance of this product as an outlet for American leaf is indicated by the fact that about 12.5 million pounds of leaf are used in its manufacture, of which from 85 to 90 percent in Norway and Sweden and about 60 or 65 percent in Denmark is United States leaf. In Finland and the Baltic States, the proportion of United States leaf is smaller, from 30 to 40 percent.

Consumption of smoking tobacco is on a more nearly constant level than that of any of the other products, but it has held its proportionate share in the general increase in tobacco consumption since 1920 (table 3). During depression periods, the tendency to reduce consumption has been largely offset by the shift to pipe tobacco from the more expensive products, cigars and cigarettes. Furthermore, there is a tendency to increase the use of cut tobacco for hand-rolled cigarettes. From one-third to two-thirds of the smoking tobacco used in the Baltic States is used in hand-rolled or hand-filled cigarettes. Variations in consumption of smoking tobacco have been widest in the Baltic States, where farmers purchase more manufactured tobacco in years when their small garden plots of home-grown leaf fail.

Considerable change has taken place in the type of leaf used in smoking tobaccos. Fire-cured, dark air-cured, and Maryland leaf have gradually given way to increased proportions of flue-cured. Furthermore, the steady decline in the old-type, coarse-cut tobacco for use in large bowl pipes also results in smaller requirements for fire-cured and Maryland leaf. Fine-cut or shag and the medium-cut English mixtures are offered in a variety of blends with varying proportions of light and dark tobacco. Dark shag, particularly in Norway and Sweden, contains primarily Virginia fire-cured and, to a smaller extent, Western fire-cured, whereas the lighter shag and the fine-cuts for use in hand-rolled cigarettes contain primarily flue-cured leaf and smaller quantities of oriental leaf. Considerable Burley and Java leaf is also used in the blends, as well as smaller quantities from Africa, Paraguay, Hungary, and Rumania.

In determining the quantity of leaf used in the manufacture of smoking tobaccos, allowance must be made for various factors. There is, for example, an increase

in weight through the addition of material other than tobacco, such as flavoring material, which makes up from 10 to 15 percent of the weight of the finished product. There is also an increase due to the addition of stems, both imported and those removed in the manufacture of other products. In Denmark, where Government data are available on this point, about 20 percent of the raw material used in the manufacture of smoking tobaccos consists of stems. In addition, the stems of most of the leaf either are allowed to remain in the leaf or are removed, steamed, rolled, and added to the mixture. There may also be a slight increase in the weight due to increased moisture content.

After allowance is made for the above factors, it is estimated that the quantities of the several types of leaf required in the manufacture of smoking tobaccos in each of the countries are approximately as indicated in table 8. About 63 percent of the American leaf used in smoking tobacco is estimated to be flue-cured, about 24 percent fire-cured (largely Virginia fire-cured), and 11 percent Burley. There are also small quantities of Maryland and dark air-cured types. Tobacco listed as from "other countries" is estimated to be about one-half oriental and semioriental types and about one-fourth Java. Oriental leaf is used largely in fine-cut for homemade cigarettes, especially in the Baltic States, and Java leaf is used largely in Denmark.

Table 8. Estimated quantities of the several kinds of leaf used in tobacco in the Scandinavian and Baltic countries, 1937

Country	From the United States					From other countries	Total a/
	Flue-cured	Burley	Fire-cured	Other	Total		
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Denmark.....	1,830	485	66	143	2,524	1,576	4,100
Sweden.....	1,248	120	882	0	2,250	375	2,625
Norway.....	1,168	200	882	20	2,270	310	2,580
Finland.....	143	45	66	0	254	540	794
Baltic States.	714	33	97	13	857	1,463	2,320
Total.....	5,103	883	1,993	176	8,155	4,264	12,419

a/ In addition, 844,000 pounds of imported stems, largely from the United States, and about 66,000 pounds of domestic leaf are used.

Use of Chewing Tobacco Declining

The most rapid decrease in the use of any of the products has been in that of chewing tobacco, where consumption fell from nearly 7 million pounds in 1920 to about 3 million in 1937. It now comprises only about 5 percent of the total weight of all products and, because of the high proportion of moisture and other material used in its manufacture, less than 5 percent of the total leaf requirements. In Denmark, leaf makes up only 60 percent of the total weight of the finished product. The remainder consists of moisture and flavoring materials, such as sugar, maple, licorice, tobacco extract, fruit juices, and gum.

Denmark and Norway together account for about 92 percent of the total chewing-tobacco consumption in these countries, and Sweden for most of the remainder. The former two countries have by far the highest per-capita consumption in Europe, and together account for about one-third of the total. One of the reasons for the popularity of chewing tobacco in these countries is the fact that smoking in any form is prohibited in the forest and lumber industry because of the fire danger.

Chewing tobacco is sold largely in the form of twist and scrap made almost entirely from fire-cured leaf. In Denmark, the leaf is almost entirely Western fire-cured, whereas in Norway it is almost entirely Virginia fire-cured (table 9). Further decline in the use of chewing tobacco will therefore directly affect the market for these two types of fire-cured tobacco.

Snuff Important in Sweden

Sweden alone now consumes nearly 10 million pounds, or over 80 percent, of the snuff used in these countries and nearly one-half of the total snuff consumed in Europe. The use of snuff in Sweden, however, has declined steadily and is now only two-thirds as large as in 1920. In Denmark and Norway, which each use roughly 1 million pounds, the consumption has increased during the past few years, particularly in Denmark. Like chewing tobacco, snuff is used largely by farmers and in the forest and lumber industry, where smoking in any form is prohibited. This fact has tended to retard the shift from snuff to other products. Furthermore, since snuff is used primarily for chewing, there have been shifts between snuff and chewing tobacco, depending upon the relative prices and the consumer purchasing power. Snuff is materially cheaper than chewing tobacco; in Sweden it costs only about 25 percent as much.

About 12 million pounds of snuff are now used annually in these countries and it accounts for about one-fifth of total tobacco consumption. Snuff is of the dark, wet type, for chewing. It has a high moisture content, estimated to be from 30 to 40 percent, and is made to a large extent from stems and raw material other than tobacco. The leaf requirements of the snuff industry are therefore materially smaller than would appear from the weight of the product manufactured. In Denmark, leaf tobacco makes up less than one-fourth the weight of the manufactured snuff. Less than 3 million pounds, or not quite 6 percent, of the total leaf imported into these countries, are estimated to be used in the manufacture of snuff.

Practically all the imported leaf used in snuff is obtained from the United States and consists of Western fire-cured, largely in lugs. Very small quantities of Virginia fire-cured are used, and in Sweden considerable domestically grown leaf is used. Large quantities of stems removed from the leaf in the manufacture of other products, as well as additional imported stems and scrap, make up the bulk of the raw material. Further decline in the consumption of snuff may therefore be expected to result in a declining demand for Western fire-cured lugs.

Table 9. Estimated quantities of leaf used, by types, for chewing tobacco and snuff in the Scandinavian countries and Finland, 1937 [a/]

Country	Chewing tobacco			Snuff			
	Western fire-cured	Virginia fire-cured	Total	Western fire-cured	Virginia fire-cured	Other	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Denmark.....	904	-	904	220	-	11	231
Sweden.....	33	121	154	2,175	33	[b/] 1,142	3,350
Norway.....	66	926	992	200	65	-	265
Finland.....	22	-	22	33	22	-	55
Total.....	1,025	1,047	2,072	2,628	120	1,153	3,901

a/ Allowance has been made for changes in moisture content, for stems, and for flavoring material.
b/ Includes about 1,014,000 pounds of domestic leaf and about 18,000 pounds of dark air-cured.

TOTAL LEAF REQUIREMENTS AND SOURCES

The total manufacturing requirements of leaf tobacco in these countries in 1937 approximated 51 million pounds, as indicated in table 10. It will be noted that oriental leaf is the most important single type, accounting for about 33 percent of total requirements. Cigar-type leaf makes up about 24 percent, flue-cured 21 percent, fire-cured about 13 percent, and Burley 4 percent, with smaller quantities of Maryland and miscellaneous types of dark air-cured leaf, including that grown domestically.

In addition to the leaf, about 1,772,000 pounds of stems are imported and retained for manufacture in tobacco products. Between 80 and 90 percent of these are imported from the United States, the remainder coming largely from Brazil.

Table 10. Total leaf requirements in Scandinavian and Baltic countries, estimated by types, 1937

Country	Flue-cured	Burley	Fire-cured	Oriental	Cigar leaf	Other types [a]	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Denmark.....	3,087	1,015	1,190	2,755	9,590	519	18,156
Sweden.....	2,790	430	3,244	3,136	1,964	[b] 1,323	12,887
Norway.....	2,358	400	2,140	1,120	220	90	6,328
Finland.....	1,113	67	143	6,060	441	0	7,824
Baltic States.	1,298	33	97	3,704	235	385	5,752
Total.....	10,646	1,945	6,814	16,775	12,450	2,317	50,947

a/ Includes about 130,000 pounds of Maryland and 62,000 pounds of dark air-cured from the United States, about 900,000 pounds of miscellaneous types from other countries, and about 1,225,000 pounds of home-grown leaf, largely used in snuff.

b/ About 80 percent home-grown.

The countries from which most of the unmanufactured tobacco is obtained are shown in table 11. For imports into Denmark, and to a smaller extent Estonia and Lithuania, data as to the actual country of origin are not available.

Oriental-leaf requirements are estimated to total about 16.1 million pounds, of which about 44 percent are obtained from Greece, 23 percent from Bulgaria, 21 percent from Turkey, 11 percent from Russia, and 1 percent from Rumania. Russian leaf plays a relatively important part only in the Baltic countries.

Cigar-leaf requirements total about 12.35 million pounds, approximately 47 percent of which are estimated to be obtained from the Netherlands Indies (Java and Sumatra), about 43 percent from Brazil, and about 10 percent from Cuba. Practically no cigar leaf is obtained from the United States.

American types are used to the extent of about 22 million pounds annually. Nearly all the flue-cured, fire-cured, and Burley is obtained from the United States. Only between 5 and 10 percent of the flue-cured is obtained from other countries. Import data indicate that competitive flue-cured imports amount to less than one-half million pounds, but it is possible that additional quantities, unclassified in official data, might increase the total from competitive sources to a maximum of 1 million pounds. China and Southern Rhodesia are about equal in importance as competitors in supplying flue-cured leaf, although smaller quantities are obtained from Nyasaland, India, and Japan.

Competition with United States leaf is almost entirely on a price basis, since American flue-cured is generally accepted to be superior in quality to the competitive growths. The price factor is relatively more important in pipe mixtures, where the addition of stronger-flavored types of leaf tends to cover up the minor variations in flavor of the flue-cured. Price and burning qualities also are important in cigarette leaf in Finland and in the Baltic States, where flue-cured leaf is added to oriental leaf in the cheaper brands in order to reduce the cost. Under these circumstances, only the cheapest grades of leaf can be used extensively.

Fire-cured leaf is practically all obtained from the United States, although small quantities of Nyasaland and Italian are also used when available at materially lower prices. Total imports from sources other than the United States are estimated to make up less than 5 percent of the total.

Although Burley and Maryland leaf are not actually obtained from any other source, there are numerous other air-cured types, such as Java, Brazilian, Paraguay, Hungarian, Indian, Algerian, and South African, which are to some extent competitive with American leaf, particularly for use in lower-priced pipe mixtures. It is estimated that about 2.2 million pounds of these types are used annually in the manufacture of smoking tobacco, compared with only about half that quantity of air-cured types from the United States. The competition between United States leaf and other air-cured types is less clearly defined and depends somewhat on price but primarily upon the limited degree to which the types are interchangeable.

Table 11. Scandinavian and Baltic imports of unmanufactured tobacco, by country of origin, average 1936 and 1937 [a/]

Type and country of origin	Denmark [b/]	Sweden	Norway	Finland	Baltic States	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Oriental leaf:						
Greece	(772)	2,265	400	2,735	833	7,005
Turkey	(441)	671	353	1,303	589	3,357
Bulgaria	(1,543)	368	396	331	1,077	3,715
Soviet Union	-	-	40	824	939	1,803
Total oriental	(2,756)	3,304	1,189	[c/] 5,388	3,438	16,075
Cigar leaf:						
Netherlands Indies	(4,740)	921	140	132	144	6,077
Brazil	(4,189)	825	30	368	78	5,490
Cuba	(661)	542	40	40	10	1,293
Total cigar	(9,590)	2,288	[d/] 213	540	232	12,863
Other types:						
United States	(5,434)	9,031	4,724	1,500	1,426	22,115
South Africa	-	105	62	3	36	206
China	-	163	26	6	12	207
India	-	-	7	3	15	25
Total other	(5,434)	[e/] 9,329	[f/] 4,840	1,512	[g/] 1,570	22,685
Unclassified	399	32	60	60	443	994
Total	18,179	14,953	6,302	7,500	5,683	52,617

a/ Includes stems; exact data not available for Denmark and incomplete for Estonia and Lithuania.
b/ Figures in parentheses are estimates.
c/ Includes 195,000 pounds from Rumania.
d/ Includes 3,000 pounds from Puerto Rico.
e/ Includes 30,000 pounds from Syria.
f/ Includes 12,000 from Syria and 8,000 pounds from Algeria.
g/ Includes 71,000 from Paraguay and 10,000 pounds from Italy.

Home-grown Leaf Supply Small

Efforts to increase production of leaf tobacco have not been successful. Each of these seven countries grows some tobacco, but the quantities are small and the quality poor. It is estimated that from 2 to 2.5 million pounds are grown annually, of which about one-half is used in manufacture, the remainder being used direct by growers without manufacture. Tobacco growing has been encouraged from time to time ever since its use was originally introduced several hundred years ago, but neither the climate nor the soil is adapted to the production of high-quality leaf. Several types are produced, largely medium and dark air-cured leaf. The amount grown depends largely upon the degree to which the Governments subsidize production, either directly or indirectly through exemption from duties and taxes In the absence of such special treatment, commercial tobacco growing tends to disappear. Relatively large numbers of farmers, however, grow small quantities in their gardens for home use, thus avoiding the excise tax on their personal requirements. Such home production, particularly common among farmers in the Baltic States, has not been included in data on consumption.

Sweden is the only country in which the domestic crop plays any appreciable part in filling manufacturers' requirements. The Swedish crop amounts to about 1 or 1.3 million pounds annually (farm weight) and represents about 10 percent of the Monopoly's total leaf requirements. It is used largely in the manufacture of snuff. Tobacco is grown by a relatively large number of farmers, who each plant about one-third acre. The Monopoly prescribes the quantity to be grown and the method of handling. The crop must be turned over to the Monopoly before the first of March, after which date no grower may be in possession of any tobacco without special permission. The average price received by the growers varies from 11 to 13 cents per pound. Although encouraged by the Monopoly, total production has changed little since before the war. Production in Sweden since 1930, farm weight, has been as follows:

	Million pounds
1930	1.35
1931	0.96
1932	1.33
1933	1.20
1934	1.09
1935	1.29
1936	1.37
1937	1.00

In Denmark, the difficulties of obtaining imported leaf during the war encouraged domestic growers, but after the war they experienced difficulty in selling their crops and almost abandoned production. When the Import Control was instituted in 1932, growers anticipated higher prices and in 1933 again increased their plantings. Because of unsatisfactory quality, the use of home-grown tobacco by manufacturers did not increase, and considerable quantities of the 1933 crop were still held in 1936. Total production in 1937 was estimated at only 7,000 pounds.

In Norway and Finland, production is practically limited to home use. In the Baltic States it is also grown largely for home use, but small quantities are used by manufacturers in Latvia and Lithuania. Plantings are closely limited by Government regulations, which endeavor to discourage home production in order to increase revenue from the excise on manufactured products. The total home-grown crop in the Baltic States is estimated at between 0.7 and 1 million pounds.

Direct Purchase Increasing

Somewhat more than one-half of the leaf imported into these countries is now shipped direct from the country in which it is grown. United States leaf is mostly shipped direct; the proportion is estimated at between 80 and 90 percent of the total quantity used. Oriental leaf and cigar leaf are largely shipped indirect through western European ports.

Several factors have operated to bring about a shift toward more direct shipment. Before the war much of the United States leaf, as well as most of the other types, were handled through Hamburg, Bremen, Amsterdam, Rotterdam, and Antwerp, which were well adapted as tobacco-distributing centers because of their geographical position and the volume of their trade. During the war, the difficulties of shipping through these ports caused increasing proportions of Scandinavian requirements to be shipped direct, and Copenhagen became more important as a reshipping point for tobacco. After the war, however, much of the trade returned to the German, Netherland, Belgian, and English ports, and Scandinavian manufacturers found it possible to obtain their requirements easily and quickly from the large stocks carried in these ports. Another factor adversely affecting the tobacco-reshipping trade of Copenhagen was the Danish import-control regulations (to be discussed later). Denmark now reexports only about 1 million pounds annually, compared with from 4 to 7 million immediately after the war.

Table 12. Scandinavian and Baltic imports of tobacco from reshipping nonproducers, average 1932-1934 [a/]

Country	Denmark	Sweden	Norway	Finland	Baltic States	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Netherlands	6,768	822	161	274	811	8,836
Germany	3,373	351	811	2,454	668	7,657
United Kingdom	1,336	489	170	481	4	2,480
Belgium	-	-	48	1,495	503	2,046
Denmark	-	35	227	214	569	1,045
Total indirect	11,477	1,697	1,417	[b/] 5,149	[c/] 2,723	22,463
Total all imports	17,079	11,241	5,196	6,085	5,459	45,060
	Percent	Percent	Percent	Percent	Percent	Percent
Proportion indirect is of total	67	15	27	85	50	50

a/ For Latvia 1931 and 1932; for Lithuania 1931, 1932, and 1933.
b/ Including 231,000 pounds from Switzerland.
c/ Including 168,000 pounds from France.

The approximate extent of indirect shipment in 1933 and 1934 is shown in table 12. These are the last years for which data showing the country of purchase or shipment are available for most of these countries. Since then practically all except Denmark have changed their import data to show the country of origin.

It will be noted that Denmark, which uses a large quantity of cigar leaf, obtained its supply largely from the Netherlands. Some Brazilian and part of the oriental leaf were obtained from Germany. Part of the American leaf received indirectly constitutes transfers of manufacturers' stocks from their main factories in one

country to branch factories in other countries. It is estimated that only about 10 percent of the American leaf is purchased outright by Danish dealers for their own account; about 90 percent is purchased by manufacturers direct from dealers in the United States or through dealers' European agents.

The situation is similar in Norway. About 90 percent of the American leaf used is shipped direct; but oriental leaf, cigar leaf, and small quantities of American leaf are purchased on the reshipping markets. There are no leaf dealers in Norway who purchase for their own account; manufacturers purchase largely direct from dealers in the United States or through their European representatives.

The Swedish Monopoly, with its centralized management and large purchasing power and buying organization, obtains nearly all of its leaf direct from the countries of production. The principal exception is cigar leaf, purchased largely on the Netherland market. Other indirect purchases consist of small supplementary purchases of American and oriental leaf.

Manufacturers in Finland and the Baltic States purchase part of their American leaf direct and part from European dealers. In Estonia and Lithuania, there are no local leaf dealers. Agents with samples call several times a year, and occasionally the manufacturers send representatives to purchase on the Netherland and German markets.

SEASONAL VARIATION IN LEAF SHIPMENTS TO THE SCANDINAVIAN AND BALTIC COUNTRIES, AVERAGE 1935-37

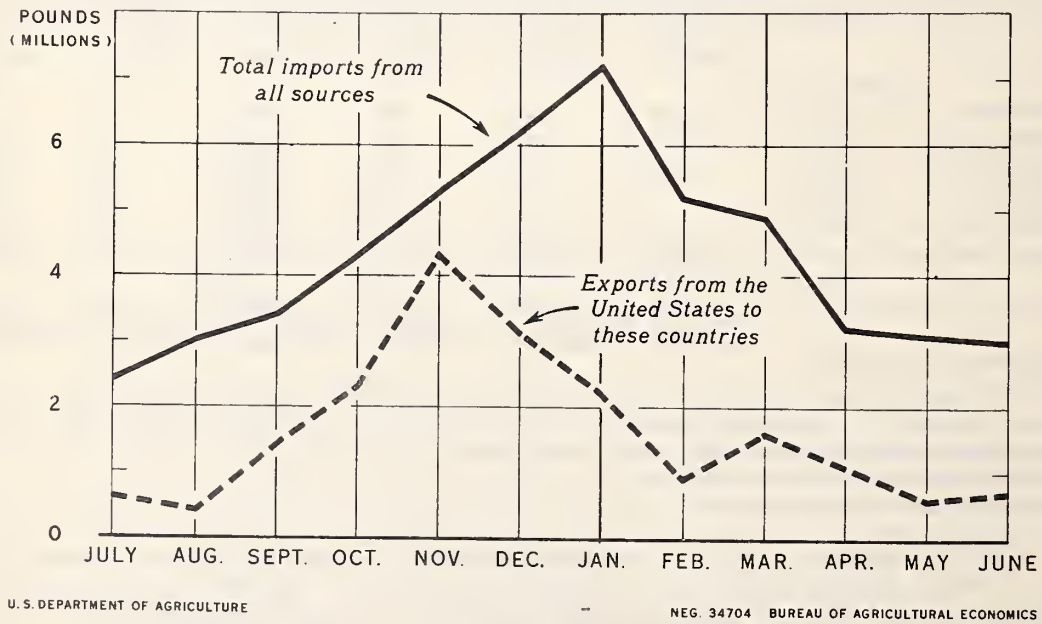


Fig. 4.

Leaf Held in the United States

Most American tobacco shipped to these countries is held in the United States for some time before shipment. This practice is distinctly different from that

followed by English manufacturers, who import nearly all of their American leaf soon after harvest. Several factors contribute to the delayed shipment to Scandinavian and Baltic countries. It is claimed that better fermentation is obtained through storage for some time in the States than under the climatic conditions prevailing in these countries. Manufacturers whose requirements of American leaf are relatively small prefer to make their purchases as needed throughout the year, thus reducing their investment in leaf and obviating the necessity for large storage facilities. Another factor of increasing importance in Denmark and in the Baltic States is the Government regulation of foreign exchange and the inability of manufacturers to obtain sufficient exchange for the purchase of large supplies in advance of actual manufacturing requirements.

The Swedish Monopoly, which buys its American leaf through its own buying organization in the United States, prizes the leaf and places it in storage in the United States until the succeeding fall before shipping it to Sweden. Flue-cured shipments usually start in September or October of the year following harvest, reach a peak in November, and are completed soon after the end of the year. Shipments of dark tobacco usually begin a few months later than those of flue-cured. Practically no shipments to Sweden are made during the summer. Shipments of United States leaf to Norway and Finland are also largely made from September to March but are much less seasonal than shipments to Sweden (figure 4).

Stocks Normally Small

Stocks of leaf tobacco carried in these countries during recent years have been small, varying from one-half to one year's supply in the larger countries and from one-fourth to one-half year's supply in the Baltic States. This is a sharp contrast to the 2- to 2.5-year supply carried in the United Kingdom and in the United States. Since the leaf for these countries is held for longer periods in the United States before shipment, it need not be aged long after it is imported. This does not mean, however, that manufacturers do not make commitments earlier; many of the larger manufacturers place their orders at or soon after harvest.

Bonded-warehouse and free-port storage in Denmark and Norway amounts to an average supply of about 6 months, in Finland of about 10 months, and in the Baltic States of from 3 to 6 months, with variations according to the season. In addition, a 1- to 3-month supply is usually held in factories. It is estimated that the Swedish Monopoly's stocks held in Sweden amount to about an 8- or 10-month supply. The total normal stocks of American leaf in these countries may be estimated about as follows:

	Million pounds
Flue-cured	6 to 9
Fire-cured	3 to 5
Burley	0.75 to 1.25

In Latvia and Lithuania, the manner in which the issuance of import licenses is administered prevents accumulation of large stocks by manufacturers. In Latvia, Government regulations require manufacturers to pay the import duty before foreign exchange is made available for payment of the leaf; this accounts for purchases on a hand-to-mouth basis. In Estonia, the high charges for Government storage discourage accumulation of stocks. Until recently, Government regulations in Denmark provided that manufacturers should not purchase leaf even for free-port storage until foreign exchange was made available for payment.

FACTORS AFFECTING DEMAND FOR AMERICAN TOBACCO

Consumption of American tobacco in these countries is dependent upon several factors, the most important of which are the following:

(1) Long-time trends toward the increased use of tobacco products in general; including shifts from one product to another in which greater or smaller proportions of American leaf are used and shifts in blends of the several types of leaf used in a product;

(2) More or less cyclical or short-time variations in consumer purchasing power during periods of depression and prosperity, which affect the level of total consumption and result in shifts between products;

(3) Relative prices and supplies of competitive leaf;

(4) Government measures, especially taxation rates and changes, and control of imports.

Long-time Trends and Shifts

The most important factor affecting the demand for American leaf is the long-time or nonrecurring trends and shifts in the habits and tastes of consumers. In the first place, the total consumption of leaf has been increasing at the rate of about 2 percent a year from one depression period to the next or from one prosperity period to the next (table 2). For these countries as a group, this amounts to a normal increase of about 1 million pounds a year, of which over 40 percent comes from the United States. Actually, the 1937 total leaf requirements were about 50 percent greater than those in 1921 and 1922, but part of this increase was due to the greater degree of prosperity in 1937. As already pointed out, comparison of the total weight of tobacco products consumed is not a satisfactory indication of changes in leaf requirements because of the shifts in the types of products consumed, from chewing tobacco and snuff to cigarettes and cigars, which require a greater weight of leaf per pound of product.

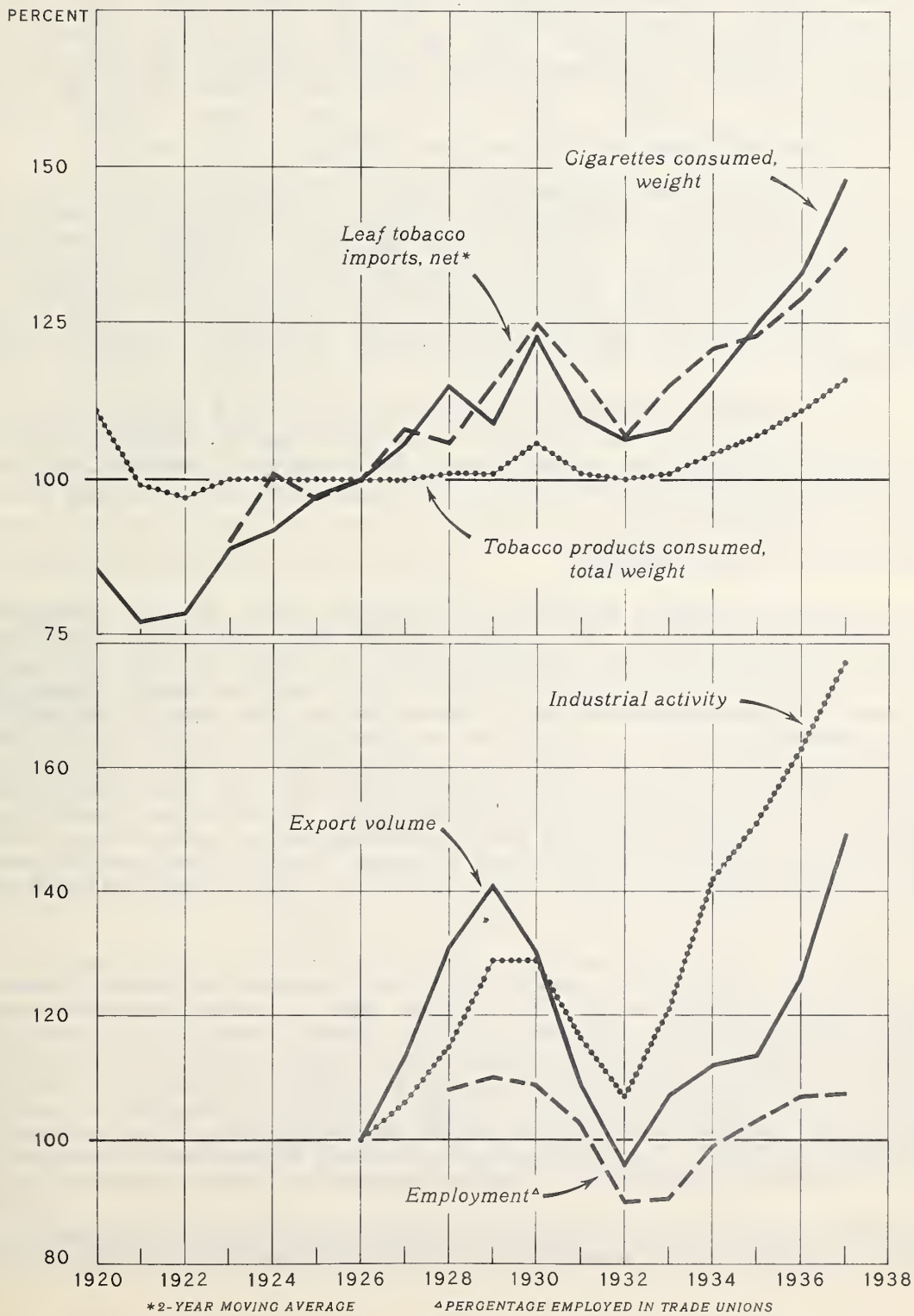
Part of the increased consumption since the war has been due to increased smoking by women, and this factor may not have an equally stimulating effect during succeeding years. The gradual increase in leaf requirements, however, is expected to continue except for temporary periods of recession.

The long-time shifts in consumption from chewing tobacco and snuff to cigarettes and cigars (table 3 and figure 2) has resulted in a shift away from fire-cured to flue-cured leaf, as well as some increase in Burley. The effect of the shift from one product to another, however, cannot be examined without also taking into consideration the changes in consumer taste that have resulted in increased popularity of blended cigarettes containing flue-cured tobacco as compared with the pure oriental cigarettes. Another shift has been toward lighter blends in pipe mixtures.

It is estimated that the decline in consumption of chewing tobacco since 1921 has resulted in a loss of more than 2 million pounds in the market for American fire-cured leaf, of which about 1 million was Western leaf to Denmark and 1 million Virginia fire-cured to Norway. Similarly, the decline in snuff consumption has resulted in a loss in the Swedish market for another million pounds of fire-cured leaf, almost entirely Western types. There has therefore been a reduction of 3 million pounds in the market for fire-cured tobacco, or a loss of about one-third from the 1921-1922 level. The shift away from coarse-cut tobacco used in old-fashioned, large-bowled pipes, in which Maryland and Ohio leaf was used largely in Denmark, has practically taken away the market for this type of leaf, a loss of about one-half million pounds.

CONSUMPTION OF TOBACCO IN DENMARK, SWEDEN, NORWAY, AND FINLAND, AND BUSINESS ACTIVITY, 1920-37

INDEX NUMBERS (1926=100)



*2-YEAR MOVING AVERAGE

△PERCENTAGE EMPLOYED IN TRADE UNIONS

U. S. DEPARTMENT OF AGRICULTURE NEG. 34705 BUREAU OF AGRICULTURAL ECONOMICS

Fig. 5.

Although cigarette consumption has doubled since 1921, this increase would have been of little advantage to American growers had the type of cigarettes not changed materially. From 1921 to 1931, cigarettes in these countries were manufactured almost entirely from oriental leaf with the exception in Norway of small quantities of English-type cigarettes and the addition in the other countries of some flue-cured leaf to oriental-type cigarettes. Since 1931, however, there has been a rather rapid increase in the popularity of blended cigarettes containing from 30 to 50 percent flue-cured leaf and from 10 to 30 percent Burley. Including that used in other types of cigarettes, flue-cured leaf is now estimated to make up about 26 percent of the total leaf used in cigarettes and Burley about 5 percent.

It is estimated that the amount of flue-cured leaf used in cigarettes in 1937 was from 3.5 to 4 million pounds greater than in 1930, or between three and four times the 1930 quantity. In addition, there has been an estimated increase of about 1 million pounds in the use of flue-cured leaf in pipe mixtures, both through increased consumption of pipe tobaccos and through the shift to lighter mixtures. The total gain in flue-cured during the past 6-10 years, therefore, is about 5 million pounds, approximately 85 percent of which must be attributed to shifts in consumption habits. 4/

It is impossible to estimate how long the shift toward increased use of flue-cured leaf in cigarettes may continue, or how far it may go. The most rapid change has occurred during the past 3 or 4 years. It is probable, however, that the rate of increase in succeeding years will be slower, depending upon numerous factors in addition to consumer taste.

Short-time or Cyclical Changes

Short-time effects of declines in purchasing power are well illustrated by the decline of 9 percent in total consumption from about 1929 through the depression period of 1931-1934 (table 2). Similarly, from the period 1931-1934 to 1937, consumption increased about 10 percent more than the long-time trend. Figure 5 shows the relationship between variations in industrial activity, exports, and employment in the Scandinavian countries and Finland, when compared with consumption of tobacco. A 10-percent decline from the present level of business activity would probably mean a loss of about 1 million pounds in the use of American leaf. Cigarettes and cigars, which are relatively expensive, tend to decline more sharply during depression periods because some smokers change to pipe tobacco and snuff, which are relatively much cheaper. The consumption of the latter products, therefore, declines less sharply when purchasing power is reduced. Dark types used in pipe mixtures, chewing tobaccos, and snuff, therefore, may be somewhat less subject to depression losses than flue-cured and Burley, which are largely used in cigarettes.

Changes in leaf prices appear ultimately to affect the quantities used, but the effects are usually not apparent for some time. A single high-priced crop may result in smaller imports from that crop and reduced stocks, which may be built up again from succeeding lower-priced crops. But continued higher prices cause manufacturers to search for substitutes, to change blends, or to shift to lower-priced grades. It is extremely difficult to measure accurately the effect of leaf-price changes upon the quantities used because of the large number of other factors involved and the absence of accurate data as to prices and the actual consumption of each type of leaf. For instance, changes in prices of American crops are generally

4/ Relatively large quantities of flue-cured tobacco were used in these countries during and immediately following the war, largely because it was impossible to obtain sufficient quantities of oriental leaf even at high prices. Soon after the war, manufacturers returned to the use of more nearly normal proportions of oriental leaf in cigarettes.

not reflected in the volume of exports to the Scandinavian and Baltic countries until the succeeding crop year, inasmuch as most of the leaf is held in the United States for a considerable time after the crop is marketed. Even after the leaf arrives, it is usually held about a year before actually being manufactured; therefore, changes in leaf prices even at the time of importation may not be reflected in the quantities consumed until some time later. Furthermore, changes in leaf prices may affect the quantities used in a low-priced product, such as pipe tobacco or snuff, without affecting the quantities used in higher-priced products, such as cigarettes or chewing tobacco.

From 1932 to 1937, the quantities of Western fire-cured and Virginia fire-cured leaf exported to these countries varied substantially with changes in the average price per pound exported. In almost every instance, an increased price over that of the preceding year was associated with a decline in exports, and a decreased price with larger exports. A variation in price of 1 cent per pound was associated with an average variation of one-half million pounds, or about 7 percent, in the quantity exported to these countries. It does not necessarily follow, however, that variations in export volume were entirely due to price or that the quantity actually consumed by manufacturers varied as much as the quantity exported. In the case of flue-cured tobacco, the rapid increase in consumption during recent years has overshadowed the effect of variations in price; however, exports increased far more rapidly when the average price was lower.

Another consideration with respect to leaf prices is the fact that until recently the Import Control in Denmark, and to a lesser extent in some of the other countries, limited the amount of foreign exchange available for the purchase of tobacco. With increased leaf prices, the quantities purchased had to be restricted or manufacturers had to turn to cheaper grades.

Leaf prices affect the quantities of American leaf consumed, primarily through changes in the proportions used in blends. Actual leaf prices are less important than their relationship to the prices of competitive leaf, and competition is not restricted to leaf of the same types. Within limitations, oriental-type leaf in these countries competes with flue-cured in cigarettes, whereas air-cured types and cigar leaf from several countries compete with American types for use in pipe tobaccos. Although only relatively small quantities of American types of leaf are obtained from sources other than the United States, the average price per pound of imports of competing flue-cured leaf from China, India, Rhodesia, and Japan during the past 5 years was fully 20 percent less than that of flue-cured leaf imported from the United States. Certain grades of Hungarian, Java, and Paraguay leaf for pipe mixtures have been available at prices lower than those for American air-cured types.

The popularity of blended cigarettes, as well as that of the pure flue-cured cigarettes, is dependent to some extent upon the price at which they are offered in comparison with the price of oriental cigarettes. If flue-cured prices rise sharply compared with oriental leaf, the selling price of blended cigarettes tends to become less attractive to consumers. Furthermore, smaller proportions of flue-cured may be used in the blends, and new brands are frequently introduced containing less flue-cured leaf. In Norway, for instance, popular cigarettes fall into two principal price classes, the low-priced group at from 4 to 5.5 øre each and the high-priced group at 5.5 to 6 øre each.[5/] The low-priced group contains only pure flue-cured blended cigarettes, whereas the high-priced group is predominantly oriental-type cigarettes.

5/ 1 krone of 100 øre = 25 United States cents at current rate of exchange.

Average prices of oriental-type leaf and American leaf during the 5 years 1933-1937 are shown in table 13. It will be noted that the average cost of American flue-cured leaf is only from 42 to 73 percent as high as that of oriental-type leaf. An allowance must be made, however, for certain stemming losses in flue-cured leaf before prices are strictly comparable with oriental leaf, from which, of course, none of the stems are removed.

In some countries, particularly Finland and the Baltic States, cheaper grades of flue-cured leaf are added in varying proportions to lower the cost of the low-priced brands of oriental cigarettes; and, consequently, leaf prices are an important factor in determining the proportion of flue-cured to be used. That low-priced grades of American leaf are used for this purpose is evident from the fact that during the 6 years 1932-1937 the average price per pound of flue-cured leaf (prized and redried) exported to Finland was 11.1 cents per pound and to the Baltic States 12.5 cents. This compares with an average price of about 21.1 cents for that exported to Denmark and Norway and of 30 cents for exports to Sweden. In pipe tobaccos containing mixtures of stronger-flavored dark leaf, the opportunity for substitution depending upon price is even greater than in cigarettes.

The price per pound of Western fire-cured leaf exported to Sweden was much lower than that of the other types, because the fire-cured consisted largely of lugs and lower grades of leaf used almost entirely for snuff. In Denmark, on the other hand, the higher grades of Western leaf, including spinners (wrappers), are used in twist chewing tobacco. Similarly, Norway takes higher-priced grades of Virginia fire-cured because greater proportions of the spinner grades are used in chewing tobacco.

Table 13. Relative price of United States and oriental-type leaf in Scandinavian and Baltic countries, average 1933-1937 [a/]

Country	Monetary unit [b/]	Price per kilogram			Percent flue-cured price is of oriental price
		Oriental leaf	United States leaf		
			All types	Flue-cured [c/]	
					Percent
Denmark.....	Krone	2.77	1.57	1.57	57
Sweden.....	Krona	4.67	2.25	3.05	65
Norway.....	Krone	2.79	2.05	1.96	70
Finland.....	Markka	31.00	12.70	13.00	42
Estonia.....	Kroon	1.69	1.18	1.23	73
Latvia.....	Lat	3.47	1.63	1.76	51
Lithuania....	Litas	3.94	1.81	1.83	46

a/ Average of declared values at time of importation into the country.

b/ In United States cents, average rates of exchange for the years 1933-1937 were as follows: Denmark, 22.19 cents; Sweden, 25.6; Norway, 24.96; Finland 2.19; Estonia, 27.52; Latvia, 26.54; Lithuania, 16.60.

c/ Estimated.

Government Policies Affect Demand

Government measures are probably the most important single factor affecting the consumption of tobacco products. The interests and aims of the Governments with respect to the tobacco industry vary somewhat among the countries, but generally fall into the following three categories:

(1) To obtain revenue from the taxation of tobacco is without question the most important and universal aim, not only in these countries but in most other industrial countries of the world;

(2) Each country endeavors to manufacture its own products and develop its own industries in order to provide employment and income for domestic labor and investments;

(3) Most of these countries endeavor to influence the volume and direction of their foreign trade, both for political and for economic reasons.

These aims are implemented through taxation, through regulations governing the operation of the industry in its various phases, such as employment, wages, use of machinery, prices, and distribution, and through import controls, quotas, and foreign trade and clearing agreements.

The total revenue collected from tobacco in these countries in 1937 amounted to more than $60,000,000, or about $1.20 per pound of leaf manufactured, and varied from about 85 cents per capita in Lithuania to $3.81 per capita in Sweden. The average per-capita tobacco revenue amounted to $2.70 for the countries as a group, which is relatively small when compared with the per-capita tobacco revenue of between $4.50 and $5 collected in the United States and of $8.30 in Great Britain. It must be remembered, however, that the purchasing power in the Scandinavian and Baltic countries (particularly the latter) is generally smaller than in Great Britain and the United States. Taxes make up between 18 and 68 percent of the retail price, according to product, and for all tobacco products in these countries an average of 46 percent of the retail price, the percentage being highest for cigarettes.

In these countries the **methods of taxation** are generally similar. In each country, tobacco revenue is obtained from both import duties and excise or internal-revenue taxes. The only exception is Sweden, where since 1924 there has been no import duty on leaf tobacco. In each country, tobacco excise taxes are far more important than the import duty. About 82 percent of the tobacco revenue is obtained from excise taxes and about 18 percent from import duties. Table 14 shows the import-duty rates on leaf tobacco and stems effective in each country in 1937. Since the import duty applies to the quantity of unmanufactured tobacco, it falls with equal weight on all products according to the weight of tobacco used in them.

Table 14. Import duty rates on tobacco in the Scandinavian and Baltic countries in effect in 1937

Country	Year rate became effective	Rate per kilogram			Rate per pound [a]	
		Monetary unit	Leaf	Stems	Leaf	Stems
					Cents	Cents
Denmark.....	1924	Krone	2.00	2.00	20.2	20.2
Sweden.....	1924	Krona	0.00	0.00	0.00	0.00
Norway.....	[b] 1932	Krone	[b] 4.05	[b] 4.05	46.1	46.1
Finland.....	1931	Markka	[c] 25.00	[c] 18.00	24.9	17.9
Estonia.....	1928	Kroon	2.40	2.40	29.4	29.4
Latvia.....	1928	Lat	3.00	2.00	27.0	18.0
Lithuania...	1933	Litas	1.50	1.50	11.4	11.4

a/ Conversions to cents were made at the average exchange rates for 1937 as follows: Denmark, 22.3 cents; Sweden, 25.75; Norway, 25.1; Finland, 2.2; Estonia, 27.0; Latvia, 19.8; Lithuania, 16.8.

b/ Duty has been 2.25 kroner per kilogram since 1902, but last surcharge increase, totaling 80 percent, became effective 1932.

c/ From most-favored nations; from other nations, 80 markkaa on leaf and 65 markkaa on stems.

Excise-tax rates vary widely from one product to another and from one country to another. Nearly always the rate of excise tax varies according to the selling

price of the product. A superior product selling at a higher price almost invariably pays a higher rate of tax. See table 15. The only exceptions are chewing tobacco and snuff in Norway and Latvia, where the tax is at a uniform rate per kilogram without regard to price.

Excise taxes on cigarettes are generally applied at specified rates (in the monetary unit of the country) per thousand cigarettes, with wide variations according to the retail prices at which the cigarettes are sold. The only exception to this method is in Sweden, where the rate is 2 kronor per thousand on all cigarettes, plus 54 percent of the retail price in the case of *papiros* and 56 percent in the case of cigarettes without mouthpieces. In Finland the excise tax is applied to all products at a uniform proportion of 36 percent of the retail price. Cigars are generally taxed according to the same method as cigarettes except in Denmark where the rates vary with price classes from 10 to 50 percent of the wholesale price, and in Sweden where the rate for cigars is 8 kronor per thousand plus 25 percent of the retail price and for cigarillos 4 kronor per thousand plus 37 percent. Smoking tobacco is taxed at varying rates per kilogram according to the retail-price class and in some cases according to the width of cut, so that fine-cut suitable for hand-rolled cigarettes is taxed at a higher rate than coarse-cut suitable only for pipes. Chewing tobacco and snuff are also taxed at a percentage of the retail price per kilogram, except in Norway and Latvia where the amounts per kilogram are fixed regardless of price.

Table 15. Taxation and retail price per pound of tobacco products in Scandinavian and Baltic countries, 1937 a/

Country	Cigarettes		Cigars		Pipe tobacco		Chewing tobacco		Snuff	
	Tax	Retail price	Tax	Retail price	Tax	Retail price	Tax	Retail price	Tax	Retail price
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Denmark	1.95	3.70	0.70	2.80	0.30	0.80	0.30	1.20	0.20	0.65
Sweden	2.40	5.00	1.60	4.00	1.40	2.50	0.70	1.80	0.26	0.45
Norway	2.20	4.40	1.90	4.30	0.70	1.70	0.50	1.80	0.80	1.60
Finland	0.90	1.80	1.20	2.50	0.55	0.80	0.90	2.10	0.34	0.53
Estonia	1.40	2.10	1.10	2.40	0.70	1.10	-	-	-	-
Latvia	1.70	3.30	-	-	0.70	1.20	-	-	-	-
Lithuania	1.60	3.20	-	-	0.90	1.50	-	-	-	-

a/ Rounded conversions at current rates of exchange.

The effect of various rates of taxation on the consumption of tobacco products becomes apparent when the consumption in low-tax countries is compared with that in high-tax countries, and also when changes in consumption following changes in the tax rates are noted.

Denmark, with the lowest tax rate per pound of leaf consumed in any of the seven countries, has the highest per-capita tobacco revenue with the exception of Sweden, where the per-capita revenue is only about 7 percent greater. Norway and Sweden, with tax rates per pound about twice as high as that in Denmark, have a per-capita leaf consumption less than one-half as great. In order more accurately to compare the tax rates in the different countries, however, it is necessary to examine each product separately, since both the types of the products and their tax rates vary widely.

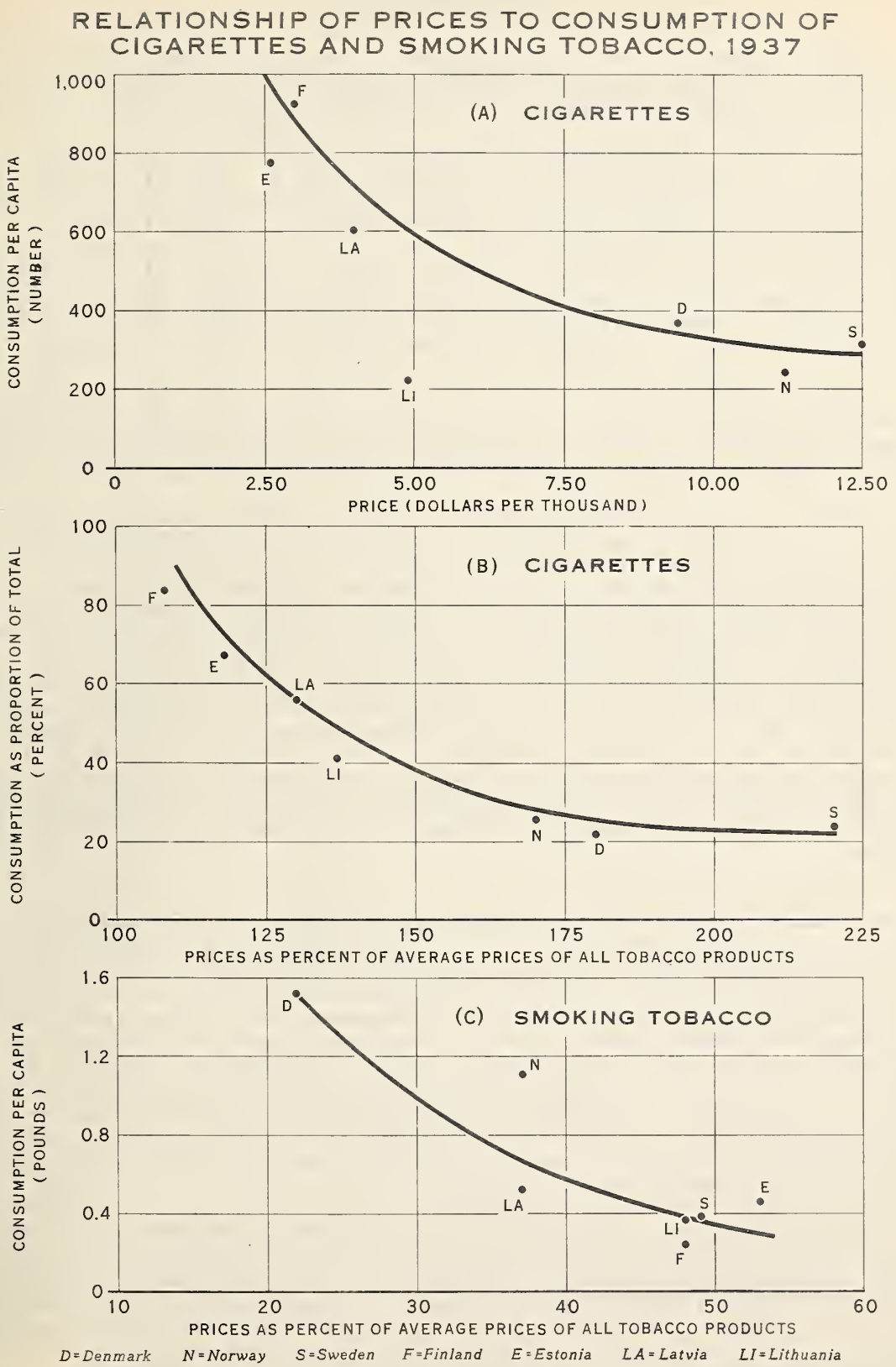

RELATIONSHIP OF PRICES TO CONSUMPTION OF CIGARETTES AND SMOKING TOBACCO, 1937
(A) CIGARETTES
CONSUMPTION PER CAPITA (NUMBER)
1,000
800
600
400
200
0
F
E
LA
D
S
LI
N
0
2.50
5.00
7.50
10.00
12.50
PRICE (DOLLARS PER THOUSAND)
(B) CIGARETTES
CONSUMPTION AS PROPORTION OF TOTAL (PERCENT)
100
80
60
40
20
0
F
E
LA
LI
N
D
S
100
125
150
175
200
225
PRICES AS PERCENT OF AVERAGE PRICES OF ALL TOBACCO PRODUCTS
(C) SMOKING TOBACCO
CONSUMPTION PER CAPITA (POUNDS)
1.6
1.2
0.8
0.4
0
D
N
LA
E
S
LI
F
10
20
30
40
50
60
PRICES AS PERCENT OF AVERAGE PRICES OF ALL TOBACCO PRODUCTS
D=Denmark N=Norway S=Sweden F=Finland E=Estonia LA=Latvia LI=Lithuania
U.S. DEPARTMENT OF AGRICULTURE
NEG. 34706
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Fig. 6.

Table 15 shows the relationship between tax rates of various products and retail prices. It will be noted that higher prices are almost invariably associated with higher taxes and that prices are generally about twice the amount of the tax.

Section A of figure 6 shows the relationship of prices of tobacco products to consumption. It will be noted that in Finland, Estonia, and Latvia, where cigarettes are cheapest, the per-capita consumption is greatest, whereas Denmark, Sweden, and Norway with high cigarette prices, have the lowest per-capita consumption. The principal exception is Lithuania, where consumption is low though cigarette prices are average. This may be explained largely by the fact that most of the smoking tobacco in Lithuania, about two-thirds of the total, is used by consumers in hand-filling cigarette tubes and, therefore, total cigarette consumption is much higher than is apparent from the quantity sold in the form of manufactured cigarettes.

Section B indicates that the relative price of cigarettes compared with prices of other products has an even greater influence upon the consumption of cigarettes. The same relationship of prices to consumption generally holds true for other tobacco products, though less clearly defined because of the difference in consumer habits.

Since 1920 there have been numerous changes in the excise-tax rates in these countries; tax increases have generally been followed by reduced consumption and lower taxes by increased consumption. The effect on consumption, however, is frequently not fully apparent until the second year and at times the third year following the tax change. Furthermore, the trend toward increased consumption in periods of prosperity and declining consumption in depression periods and the general long-time increase in cigarette consumption have made the effects of tax changes less clearly defined. Since 1920 there have been about 20 changes in cigarette excise taxes in these countries. Of the 17 tax increases, 11 were followed by decreased consumption. The 3 cigarette-tax reductions were followed by increased consumption. The net effect of the 20 changes has been a change of approximately 7 percent in consumption during the first year following the tax change, of 5 percent the second year, and of 1 percent the third year. There is a tendency for consumers eventually to become accustomed to new price levels and to resume their normal volume of consumption.

One of the most important effects of tax changes has been the shift in consumption from one product to another when tax rates were increased on certain products and at the same time were lowered or remained unchanged on other products. The best illustration of such a shift is in Denmark, where in 1928 taxes on cigarettes were approximately doubled, while taxes on cigars and cigarillos were materially reduced. Again in 1932, cigarette taxes were increased, while cigar taxes remained unchanged. As a result, the total import duty and excise taxes now make up only 18.5 percent of the total retail price of cigars and cigarillos compared with 52 percent for cigarettes. Consequently, cigarettes have become relatively much more expensive than cigars and cigarillos. Consumption declined sharply in 1929 and again in 1932 and 1933, and in 1937 had not yet regained its 1928 level. At the same time, the consumption of cigars and cigarillos, which had been declining, rapidly increased to a 1937 level 120 percent above that in 1928.

The future market for American leaf, therefore, is subject to the taxation policies in these countries; and, if cigarette taxes are increased further or increased relative to other products, the demand for flue-cured and Burley leaf will increase less rapidly and will possibly decrease. Lower taxes on cigars and cigarillos, as in Denmark, definitely reduce the demand for American cigarette and pipe-tobacco leaf in these countries. The policy of relatively low taxes on chewing tobacco and snuff encourages the demand for dark tobacco in these products.

Table 16. Average retail price of tobacco products consumed in Scandinavian and Baltic countries, 1937 a/

Country	Cigarettes		Cigars		Price per pound		
	Per 20	Per pound	Each b/	Per pound c/	Smoking	Chewing	Snuff
	Cents	Dollars	Cents	Dollars	Dollars	Dollars	Dollars
Denmark.....	18.4	3.65	3.25	2.80	0.92	1.17	0.65
Sweden.....	25.0	5.33	5.62	4.07	2.46	1.76	0.46
Norway d/.....	22.4	4.37	3.21	4.26	1.72	1.76	1.63
Finland.....	6.1	1.76	2.78	2.52	0.85	2.05	0.53
Estonia.....	4.9	2.07	2.95	2.44	1.10	-	-
Latvia.....	7.9	3.31	-	-	1.22	-	-
Lithuania.....	9.7	3.27	-	-	1.53	-	-

a/ For rates of currency conversion, see table 14, footnote a.

b/ Excluding cigarillos in Denmark and Sweden, where average cigarillo prices are 1.57 and 2.41 cents, respectively.

c/ Includes cigarillos.

d/ Cigarette taxes and prices were increased further on October 1, 1937.

Another method by which these governments influence the tobacco industry is through the control of foreign trade. The object is primarily to obtain a more favorable balance of trade for the country concerned and secondarily to develop home industries and increase the degree of national self-sufficiency. Two principal methods are employed: (1) import restrictions, quotas, and licenses, which reduce imports; and (2) trade and clearing agreements, which seek to balance imports from one country against exports to that country.

Import restrictions are in the form of monetary quotas limiting the amount of foreign exchange available to pay for imports, and importers are required to obtain special permits or licenses for each importation. Such import controls are in effect in Latvia and Lithuania, and until recently in Denmark and Estonia. In Denmark, the control was started in 1932 but was not applied to unmanufactured tobacco until 1934.

Restricting the amount of foreign exchange causes manufacturers to purchase lower-quality and lower-priced leaf in order to obtain as large a quantity as possible with the limited funds. Occasionally licenses are granted for imports from certain countries and withheld for others with the result that manufacturers tend to shift their blends. Furthermore, when leaf imports are limited, manufacturers lose their incentive to increase the volume of sales through advertisement and seek instead to obtain a larger margin of profit per unit. During periods of depression involving reduced export trade, it is possible that import restrictions may be tightened in an effort to balance international payments at the lower level.

Another effect of import controls has been greatly to reduce the imports of manufactured tobacco products and thus increase the proportion supplied by domestic manufacturers. Net imports of tobacco products into Denmark declined from 1.6 million pounds (about 10 percent of total consumption) in 1931 to 0.2 million pounds (1 percent of consumption) in 1936 and 1937. In the Baltic States, imports of tobacco products have practically ceased. In Norway and Sweden, on the other hand, such imports have increased during recent years to 2.5 and 5.5 percent, respectively, of total tobacco products consumed.

Each of the countries considered has trade or clearing agreements with numerous other European countries, several of which involve tobacco. In common with that

of import restrictions, the object of these agreements is generally to reduce the net outflow of money by bilaterally balancing imports against exports. Efforts are made to divert imports to those countries that constitute the best export markets. The principal exports from these countries are forest products, livestock products, and, from Sweden and Denmark, industrial products as well. The principal markets for such products as lumber, wood pulp, butter, and eggs are the United Kingdom, Germany, and the Netherlands, which sell but do not grow tobacco for export. The tobacco-growing countries in southeastern Europe constitute good outlets for industrial products.

Clearing and compensation agreements primarily facilitate international payments without greatly affecting the volume of tobacco imported. Trade and barter agreements, however, in several cases specify minimum quantities of tobacco to be imported in return for increased exports of other products. The exact terms of such agreements are frequently kept secret and it is therefore not possible to determine their effect.

It is significant to note that most of the agreements involving tobacco are with countries that produce oriental-type tobacco in southeastern Europe. The only exceptions appear to be Denmark's agreement with the Netherlands covering imports of Netherlands Indian cigar and pipe-tobacco leaf. Latvia and Lithuania have agreements with the Soviet Union covering imports of Russian oriental-type leaf. It is reported that Lithuania agreed to take 4.1 million litu (about $690,000) worth of Russian leaf from 1935 to 1938. This is far in excess of the quantity of this type used by Lithuanian manufacturers, and consequently much of the leaf has been reexported to other western European countries. Insofar as such agreements result in increased consumption of oriental-type leaf, the effect will be largely to the disadvantage of American types, which are the only other types extensively used in cigarettes.

Other forms of government regulation have less direct influence upon the market for American leaf. Numerous regulations, both by governments and by semiofficial associations, seek to insure fair play and to prevent unfair competition. In some countries, manufacturers' associations specify sales rebates, discounts, types of packages, and advertising expenditures. In others more control is exercised. For example, in Lithuania the Tobacco Manufacturers' Syndicate establishes quotas for manufacturers; in Finland the Manufacturers' Price Agreement and in Norway the Trust Control Committee have authority to fix prices for products; and in Denmark government regulations limit the use of machinery in cigar manufacturing in order to prevent further unemployment in that industry.

An important ever-present question is that of monopolies. With the present trend to increase socialization and nationalization of industries and resources, the extension of monopoly principles to the tobacco industry, as in Sweden, is frequently proposed. Denmark and Norway appear to be the least likely to take such steps. It is felt that a monopoly in Denmark would be socially undesirable because of the increased unemployment that would result from closing the large number of small cigar factories. In Finland and the Baltic States, however, the tendency toward monopolies is stronger, and the Latvian Government took over one of the larger factories in 1937.

Reasons advanced to justify monopolies are to secure the maximum revenue to the state, to provide greater control over production and sources of raw material, and to nationalize the industry by removing all foreign manufacturing interests. The last-named factor is an important one, since much of the manufacturing in Finland and the Baltic States is now in the hands of German, English, and Greek interests, frequently more powerful than local interests.

Table 17. Consumption of tobacco products in the Scandinavian and Baltic countries, by weight, 1920-1937 a/

Year	Denmark	Sweden	Norway	Finland	Total
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
CIGARS AND CIGARILLOS					
1920	4.72	2.38	0.30	0.20	7.60
1921	3.41	2.05	.18	.20	5.84
1922	3.58	1.80	.12	.22	5.72
1923	3.97	1.54	.09	.27	5.87
1924	3.84	1.62	.09	.23	5.78
1925	3.41	1.62	.15	.22	5.40
1926	3.63	1.65	.10	.22	5.60
1927	3.51	1.63	.08	.23	5.45
1928	3.44	1.65	.15	.25	5.49
1929	4.10	1.68	.16	.22	6.16
1930	4.66	1.74	.17	.19	6.76
1931	4.76	1.64	.15	.08	6.63
1932	4.67	1.67	.15	.10	6.59
1933	5.46	1.50	.14	.11	7.21
1934	6.20	1.52	.17	.13	8.02
1935	6.80	1.54	.18	.14	8.66
1936	7.23	1.56	.18	.17	9.14
1937	7.57	1.58	.22	.21	9.58
CHEWING TOBACCO					
1920	3.27	.85	2.65	.16	6.93
1921	2.61	.73	2.65	.17	6.16
1922	2.71	.64	2.65	.16	6.16
1923	2.74	.58	2.72	.16	6.20
1924	2.63	.52	2.65	.14	5.94
1925	2.63	.49	2.54	.13	5.79
1926	2.61	.47	2.42	.12	5.62
1927	2.35	.43	2.32	.11	5.21
1928	2.18	.40	2.08	.11	4.77
1929	2.24	.38	2.14	.10	4.86
1930	2.23	.33	2.04	.10	4.70
1931	2.06	.31	1.84	.06	4.27
1932	2.08	.30	1.63	.04	4.05
1933	1.72	.27	1.49	.04	3.52
1934	1.67	.24	1.43	.04	3.38
1935	1.61	.23	1.40	.03	3.27
1936	1.55	.22	1.40	.03	3.20
1937	1.46	.21	1.41	.03	3.11
SNUFF					
1920	.55	14.40	1.05	.13	16.13
1921	.52	13.45	1.05	.13	15.15
1922	.59	12.47	1.04	.17	14.27
1923	.67	12.15	1.08	.22	14.12
1924	.71	11.83	1.04	.22	13.80
1925	.72	11.71	1.16	.22	13.81
1926	.79	11.60	1.17	.20	13.76
1927	.85	11.33	1.08	.20	13.46
1928	.87	11.03	1.05	.19	13.14
1929	.90	10.68	1.05	.20	12.83
1930	.94	10.71	1.03	.20	12.88
1931	.99	10.66	.91	.16	12.72
1932	.93	10.68	.92	.14	12.67
1933	.98	10.45	.86	.14	12.43
1934	1.01	10.10	.85	.15	12.11
1935	1.06	9.86	.85	.15	11.92
1936	1.10	9.73	.90	.17	11.90
1937	1.10	9.69	.96	.16	11.91

Continued -

Table 17. Consumption of tobacco products in the Scandinavian and Baltic countries, by weight, 1920-1937 - Continued

Year	Denmark	Sweden	Norway	Finland	Estonia	Latvia	Lithuania	Total
CIGARETTES	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
1920	2.16	1.95	1.40	4.50	0.05	-	-	-
1921	2.20	1.75	1.27	3.79	.16	0.57	0.70	10.44
1922	2.41	1.44	1.22	4.12	.36	.86	.70	11.11
1923	2.80	1.43	1.25	4.91	.83	1.07	.70	12.99
1924	2.91	1.54	1.16	5.14	.84	1.18	.70	13.47
1925	3.10	1.61	1.47	5.13	1.13	1.21	.90	14.66
1926	3.35	1.76	1.37	5.24	.97	1.32	.86	14.86
1927	3.46	1.88	1.32	5.74	1.20	1.27	.90	15.77
1928	3.90	2.15	1.28	6.17	1.25	1.31	1.00	17.06
1929	2.60	2.39	1.36	6.37	1.29	1.41	.96	16.38
1930	3.31	2.65	1.55	6.94	1.30	1.44	.84	18.03
1931	3.35	2.95	1.43	5.16	1.30	1.36	.91	16.46
1932	2.97	3.13	1.43	4.94	.76	1.15	.80	15.18
1933	2.95	3.03	1.47	5.25	.76	1.19	.73	15.38
1934	3.08	3.38	1.48	5.69	.75	1.26	.71	16.35
1935	3.31	3.78	1.53	6.02	.80	1.25	.71	17.40
1936	3.56	4.15	1.75	6.16	.91	1.29	.76	18.58
1937	3.82	4.59	2.10	6.80	1.04	1.41	.86	20.62
PIPE TOBACCO								
1920	5.97	2.35	2.20	1.00	.02	-	-	-
1921	5.08	2.22	2.32	.61	.45	.33	.80	11.81
1922	5.07	2.28	2.20	.76	.83	.54	.90	12.58
1923	5.07	2.31	2.09	1.00	.97	1.13	.90	13.47
1924	4.86	2.40	2.17	1.27	.93	1.45	.90	13.98
1925	4.78	2.43	2.16	1.04	.66	1.15	.75	12.97
1926	5.06	2.40	2.01	.91	.65	1.19	1.19	13.41
1927	4.90	2.36	2.01	.94	.55	1.21	1.07	13.04
1928	4.95	2.36	2.22	.96	.55	1.44	1.30	13.78
1929	5.05	2.35	2.32	1.02	.57	1.67	1.57	14.55
1930	5.12	2.32	2.47	1.10	.49	1.34	1.14	13.98
1931	5.00	2.32	2.59	.95	.44	1.20	1.22	13.72
1932	5.40	2.49	2.57	.92	.31	.96	1.08	13.73
1933	5.42	2.54	2.64	.86	.31	.97	.91	13.65
1934	5.42	2.62	2.94	.84	.32	.98	.78	13.90
1935	5.33	2.73	3.07	.81	.48	.99	.73	14.14
1936	5.57	2.87	3.15	.91	.68	1.07	.88	15.13
1937	5.35	2.92	3.33	.89	.51	1.03	.87	14.90
TOTAL TOBACCO PRODUCTS								
1920	16.67	21.93	7.60	5.99	-	-	-	-
1921	13.82	20.20	7.47	4.90	.61	.90	1.50	49.40
1922	14.36	18.63	7.23	5.43	1.19	1.40	1.60	49.84
1923	15.25	18.01	7.23	6.56	1.80	2.20	1.60	52.65
1924	14.95	17.91	7.11	7.00	1.77	2.63	1.60	52.97
1925	14.64	17.86	7.48	6.85	1.79	2.36	1.65	52.63
1926	15.44	17.88	7.07	6.68	1.62	2.51	2.05	53.25
1927	15.07	17.63	6.81	7.22	1.75	2.48	1.97	52.93
1928	15.34	17.59	6.78	7.68	1.80	2.75	2.30	54.24
1929	14.89	17.48	7.03	7.91	1.86	3.08	2.53	54.78
1930	16.26	17.75	7.26	8.53	1.79	2.78	1.98	56.35
1931	16.16	17.88	6.92	6.41	1.74	2.56	2.13	53.80
1932	16.05	18.27	6.70	6.14	1.07	2.11	1.88	52.22
1933	16.53	17.79	6.60	6.40	1.07	2.16	1.64	52.19
1934	17.38	17.86	6.87	6.85	1.07	2.24	1.49	53.76
1935	18.11	18.14	7.03	7.15	1.28	2.24	1.44	55.39
1936	19.01	18.53	7.38	7.44	1.59	2.36	1.64	57.95
1937	19.30	18.99	8.02	8.09	1.55	2.44	1.73	60.12

a/ Variations in figures for 1935 and preceding years from those published in Technical Bulletin No. 587, "Consumption and Production of Tobacco in Europe," 1937, are due to the use of a revised basis in estimating the poundage of tobacco products consumed. This applies particularly to the figures for cigars, cigarillos, and cigarettes consumed in Denmark.

The extension of Government monopolies might work to the disadvantage of American growers because, with complete control over all phases of the industry, monopolies might seek to increase the use of home-grown leaf to replace imported leaf, prices of tobacco products might be increased to the extent of reducing consumption, and for political and economic reasons it might be desirable to force the use of leaf from those countries that offered the best market for exports. In short, government monopolies are likely to interfere with normal competitive trade based on quality and price. Such interference, however, does not necessarily follow. The Swedish Monopoly, for instance, generally purchases higher-quality leaf than do manufacturers in any of the other countries.

THE TOBACCO MARKET BY COUNTRIES

Denmark

The use of tobacco was prohibited in Denmark, as in several other countries, early in the seventeenth century. Soon, however, the Government changed its policy from prohibition to one of encouragement as an excellent source of revenue. The first spinneries for manufacturing twist are said to have been built in Copenhagen in 1665 and the first cigar factory in 1811. By 1750, there were 25 spinneries in Copenhagen, and the industry had established a guild with master spinners and apprentices. At that time, small quantities of snuff and pipe tobacco also were consumed, but smoking long clay pipes soon began in earnest. By 1880, there was an increase in the use of shag (fine-cut) in the short-stemmed pipes, and at the turn of the century cigarettes began steadily to increase in importance.

Since the war, consumption of cigars, cigarettes, and snuff has increased, that of cigars with special rapidity since 1932. Consumption of smoking tobacco has remained more nearly constant, while that of chewing tobacco has declined continually. About 20 million pounds of tobacco products are now consumed annually. Of particular interest to American growers is the shift in recent years to American-type blended cigarettes, which are now approximately equal in importance to the oriental-type.

Perhaps the most unusual factor in Danish consumption is the popularity of cigarillo and cigar smoking among women. The per-capita consumption of all tobacco products in Denmark is the third highest in Europe. That of cigars (including cigarillos) is the most important, making up nearly 40 percent of the total, with smoking tobacco 28 percent, cigarettes 20 percent, and chewing tobacco and snuff the remainder.

Table 18. Estimated quantities of leaf tobacco used by manufacturers in Denmark, by type of leaf and product, 1937

Product	United States types					Oriental types	Cigar leaf	Total
	Flue-cured	Burley	Fire-cured		Total			
			Kentucky	Virginia				
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Cigarettes.....	1,257	530	-	-	1,787	2,315	-	4,102
Smoking tobacco..	1,830	485	22	44	a/ 2,524	440	770	b/ 4,100
Chewing tobacco..	-	-	904	-	904	-	-	904
Snuff.....	-	-	220	-	c/ 231	-	-	231
Cigars.....	-	-	-	-	-	-	8,820	8,820
Total.....	3,087	1,015	1,146	44	5,446	2,755	9,590	18,157

a/ Includes 143,000 pounds of other types, largely Maryland.

b/ Includes 386,000 pounds of unclassified.

c/ Includes 11,000 pounds of other types.

About 30 percent of the leaf is from the United States, about 15 percent is of oriental-types, and about 53 percent is of cigar types largely from the Netherlands Indies and Brazil (table 18). More than half of the United States leaf is flue-cured, used both in smoking tobacco and in cigarettes; about one-fifth is Burley in cigarettes and smoking tobacco; and slightly more than one-fifth is Western fire-cured used principally in chewing tobacco. Virginia fire-cured is largely reexported to Norway.

During the war, Copenhagen became an important leaf reshipping market, but subsequently much of this trade has returned to German, Netherland, and Belgian ports. Now only from 5 to 10 percent (about 1 million pounds) of the leaf shipped to Denmark is reexported, largely to Norway and the Baltic States. Large manufacturers purchase their supplies of American leaf either direct or through local agents, and it is estimated that leaf dealers handle only about 10 percent of the country's total requirements.

The maintenance of employment plays an important part in Government policy and has been largely responsible for favoritism to the cigar manufacturers. The entire industry employs about 9,000 people, largely in cigar factories. In 1935, there were 556 tobacco factories, of which 492 were small enterprises manufacturing only cigars and cigarillos. Tobacco-factory laborers were organized as early as 1865. Because of the increased use of machinery in making cigars, there are now a relatively large number of unemployed in this field; consequently, the Government has limited the use of machinery and required that all cigars above a certain price class must be hand-made.

The most important factor favorable to American leaf in Denmark is the shift toward blended cigarettes containing flue-cured and Burley. Unfavorable are the decline in consumption of chewing tobacco and, therefore, of Western fire-cured leaf; the tax policy, which favors cigars and cigarillos with low rates and increases the rates on cigarettes; and, until recently, the Import Control, which limited funds available for purchases of leaf, encouraged shifts toward lower-priced leaf, and discouraged expansion in consumption.

Sweden

Sweden, where the tobacco industry is in the hands of a Government Monopoly, has the highest per-capita snuff consumption in the world (1.55 pounds). Snuff makes up over 50 percent of the weight of all tobacco products sold in the country; but it is the cheapest of all products and amounts to only 13 percent of the total value,

In addition to its low price, another factor contributing to the popularity of snuff is the prohibition against any form of smoking in the country's important forest industry. The use of tobacco, therefore, is limited to chewing plug, twist, or snuff; and, since the latter is by far the cheapest, it is the most popular. Snuff consumption reached a peak of more than 14 million pounds in 1919 and has declined steadily since then to less than two-thirds of that quantity in 1937. About 2.25 million pounds of American leaf, almost entirely Western fire-cured, are used annually in snuff manufacture. Very little of this type is now used in any other product and, therefore, any further decline in snuff consumption will be reflected in a smaller demand for that type.

Virginia fire-cured is used largely in smoking tobacco. With trends toward lighter mixtures, its use is also expected to decline. Chewing tobacco is made almost exclusively of Virginia fire-cured, but the consumption of chewing tobacco is negligible and also declining.

Table 19. Estimated quantities of leaf tobacco used by manufacturers in Sweden, by type of leaf and product, 1937

Product	United States types					Oriental types	Cigar leaf	Total
	Flue-cured	Burley	Fire-cured		Total			
			Kentucky	Virginia				
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Cigarettes.....	1,542	310	-	-	1,852	3,050	-	4,902
Smoking tobacco..	1,248	120	22	860	2,250	86	-	a/ 2,625
Chewing tobacco..	-	-	33	121	154	-	-	154
Snuff.....	-	-	2,175	33	b/ 2,226	-	110	c/ 3,350
Cigars.....	-	-	-	-	-	-	1,854	1,854
Total.....	2,790	430	2,230	1,014	6,482	3,136	1,964	12,885

a/ Includes about 180,000 pounds each of South African and Chinese and about 29,000 pounds of Syrian.

b/ Includes about 18,000 pounds of other types, largely Green River.

c/ Includes about 1,014,000 pounds of domestic leaf.

Contrasted with the unfavorable trend in dark tobaccos is the increased consumption of cigarettes and the fairly rapid shift in taste from oriental types (chiefly with mouthpieces) to blended American types, in which flue-cured leaf is largely used.

The Swedish Monopoly was established in 1914. Prior to that time the industry had been in the hands of private enterprises, which, as a result of severe competition and to prevent further price cutting, had formed a trust controlling a large part of the industry. At that time, the Government sought to increase its revenue and proposed higher tobacco taxes. Manufacturers had been dissatisfied with their earnings and maintained that higher taxes would ruin their business. The Government then proposed to take over the industry. This was facilitated by the fact that about 70 percent was already under one control. The plan of compensation to the manufacturers was an amortization at the rate of 12.5 percent of the preceding 5 years' average net earnings.

The conservative Government was particularly anxious that the Monopoly should be operated on a sound business basis and that it should supply high-quality products. The Board of Directors consists of 4 prominent business men elected from the 40 who hold preferred stock in the Monopoly and 4 elected by the Government. To insure quality of product and progressive management, provision was made that the monopoly should be forced to meet a certain degree of competition through permitting independent dealers to import foreign tobacco products in competition with the Monopoly's products, subject of course to licenses and the payment of excise taxes slightly higher than those paid by the Monopoly. Such imports amounted to about 12 percent of the total value of all consumption in 1937.

The Monopoly, however, has the sole right to import and manufacture leaf and has control over the home-grown crop, which amounts to about a million pounds and is used almost exclusively in snuff. Since the Government owns most of the Monopoly stock, it thus obtains a revenue from net operating profits in addition to the excise taxes paid by the Monopoly.

The general policy of maximum revenue and high quality has resulted in relatively high prices for tobacco products in Sweden (table 16). Tax rates are adjusted to what the traffic will bear without regard to encouraging the consumption of one product or one type of leaf above that of another. It is possible, however, that the Government is beginning to look with disfavor on the decreased use of Greek leaf

in cigarettes, since this may possibly affect Swedish export trade with that country. Press articles have recently agitated against the shift to the so-called "harmful" blended cigarettes and have advocated a return to the "mild" Greek types.

Norway

Norway has the highest per-capita consumption of chewing tobacco and the second highest consumption of snuff in Europe; yet more than 40 percent of the total consumption is in the form of smoking tobacco. Well over 6 million pounds of leaf are used annually, of which nearly 5 million are obtained from the United States. Nearly half of the United States leaf is flue-cured used in cigarettes and smoking, one-third is Virginia fire-cured largely for chewing, and the remainder is Western fire-cured for smoking and snuff and Burley for cigarettes and smoking.

Table 20. Estimated quantities of leaf tobacco used by manufacturers in Norway, by type of leaf and product, 1937

Product	United States types					Oriental types	Cigar leaf	Total
	Flue-cured	Burley	Fire-cured		Total			
			Kentucky	Virginia				
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Cigarettes.....	1,190	200	-	-	1,390	880	-	2,270
Smoking tobacco..	1,168	200	270	612	a/ 2,270	240	-	b/ 2,580
Chewing tobacco..	-	-	66	926	992	-	-	992
Snuff.....	-	-	200	66	266	-	-	266
Cigars.....	-	-	-	-	-	-	220	220
Total.....	2,358	400	536	1,604	4,918	1,120	220	6,328

a/ Includes 20,000 pounds of other types, largely Green River.

b/ Includes 70,000 pounds of other types.

Norway is the only country in this group in which English-type cigarettes of pure flue-cured tobacco make up any appreciable proportion of consumption. Increasing cigarette consumption and the shift from oriental to blended cigarettes favor increased use of flue-cured leaf, but the general decline in both chewing tobacco and snuff (except for a slight increase in 1937) indicates a gradually reduced market for the dark types.

Norway's tobacco industry is subject to less regulation than that of most other countries. The Government's principal aim is to obtain revenue, and it appears to have no particular interest in encouraging the consumption of one product above another or obtaining its leaf from any particular source. Trade and clearing agreements are used simply to facilitate payments in international trade.

Finland

About 84 percent of Finland's tobacco consumption consists of cigarettes made primarily of oriental-type leaf. Finland was a part of the Kingdom of Sweden until 1809, when it became an autonomous Grand Duchy of Russia. In 1917 it was declared independent. The Russian influence is probably responsible for the popularity of mouthpiece cigarettes, which still make up about one-half of the total number of cigarettes consumed. In Finland, mouthpiece cigarettes contain only oriental-type leaf; the cigarettes without mouthpieces contain up to about 25 percent of flue-cured leaf. Smoking tobacco comprises only about 10 percent of total consumption. Oriental leaf is estimated to account for about 77 percent of the country's total requirements and United States leaf only about 17 percent. Most of the leaf is reshipped from Germany, Belgium, and the Netherlands.

Prices of tobacco products (table 16) are among the lowest in Europe partly because of the relatively low taxation and partly the severe competition between manufacturers. Price cutting has forced manufacturers to lower their costs of production by purchasing low-priced leaf. After repeated efforts, they finally entered into an agreement in 1936 to raise prices. It is anticipated that the price agreement will permit them to reverse the downward trend in cigarette prices and that this may react favorably on the market for American flue-cured leaf.

Finland's prosperity is closely associated with its forest industry, the products of which make up about four-fifths of all exports. During recent years, the Government has stimulated the expansion of exports by means of numerous trade agreements with other countries. Import duties on tobacco were increased in 1937 from 18 markkaa per kilogram on leaf tobacco (25 on strips) to 60 markkaa (80 on strips). But the increase was effective only for the countries that do not enjoy most-favored-nation treatment, notably the Soviet Union. Monopolization is frequently suggested as a means of establishing greater social control over the tobacco industry and of removing foreign interests.

Table 21. Estimated quantities of leaf tobacco used by manufacturers in Finland, by type of leaf and product, 1937

Product	United States types				Oriental types	Cigar types	Total
	Flue-cured	Burley	Fire-cured	Total			
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Cigarettes	970	22	-	992	5,720	-	6,712
Smoking tobacco	143	45	66	254	340	160	a/ 794
Chewing tobacco and snuff	-	-	77	77	-	-	77
Cigars	-	-	-	-	-	243	243
Total	1,113	67	143	1,323	6,060	403	7,826

a/ Includes about 40,000 pounds of other types.

The Baltic States

The three Baltic States - Estonia, Latvia, and Lithuania - with a combined population of about 5.6 million, were created after the war, largely from Russian territory. Their products are principally agricultural and forest. From 50 to 65 percent of the tobacco consumption is in the form of cigarettes, which are almost entirely (95 to 99 percent) of the Russian type with mouthpieces. In these countries there has been no pronounced shift toward cigarettes without mouthpieces, as in Sweden and Finland. Practically the only other tobacco product is smoking tobacco, one-half to three-fourths of which is estimated to be used by consumers in making their own cigarettes. Cigars, chewing tobacco, and snuff together constitute only from 1 to 5 percent of total consumption.

United States leaf (about nine-tenths flue-cured) accounts for about 15 percent of total requirements in Estonia and about 30 percent in Latvia and Lithuania (table 22). About 1.3 million pounds of flue-cured leaf are used in smoking tobacco and cigarettes. An important consideration with respect to flue-cured tobacco is that relatively small proportions are added to essentially oriental-type cigarettes and that the proportion of flue-cured is greatest in the low-priced brands. This lowers the cost of production, since cheaper grades of flue-cured leaf are available at lower prices than suitable oriental leaf. For this purpose, the leaf must have a good burn because the cigarettes are small in diameter and made with semicombustible or noncombustible paper. Small quantities of fire-cured, Burley, and Maryland are also

used in smoking tobaccos. Most of the leaf is purchased on Netherland, German, Danish, and Belgian markets and is shipped throughout the year in relatively small quantities.

Table 22. Estimated quantities of leaf tobacco used by manufacturers in the Baltic States, by type of leaf and product, 1937

Country and product	United States types				Oriental types	Cigar leaf	Total
	Flue-cured	Burley	Fire-cured	Total			
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Estonia							
Cigarettes.....	133	-	-	133	910	-	1,043
Smoking tobacco...	74	-	9	[b/] 97	350	12	[c/] 505
Total [a/]	207	-	9	230	1,260	17	1,553
Latvia							
Cigarettes.....	275	-	-	275	1,125	-	[d/]1,410
Smoking tobacco...	320	10	55	385	415	32	[e/]1,000
Total [a/]	595	10	55	660	1,540	66	2,444
Lithuania							
Cigarettes.....	176	-	-	176	684	-	860
Smoking tobacco...	320	23	33	376	220	127	[f/] 870
Total [a/]	496	23	33	552	904	152	1,755

a/ Total include small quantities used in other products.
b/ Includes 14,000 pounds of Maryland.
c/ Includes 46,000 pounds of other types.
d/ Includes 10,000 pounds of domestic leaf.
e/ Includes 138,000 pounds of other types and 30,000 pounds of domestic.
f/ Includes 112,000 pounds of other types and 35,000 pounds of domestic.

Consumption in each of the three countries has been increasing during the past 3 years, but in no case has it regained the 1929-1930 level. Much of the decline in consumption following 1930, especially in Estonia and Latvia, may be attributed to sharply increased taxes. When consumption in 1934 dropped sharply from the 1930 level, tax rates were adjusted downward and (concurrently with improved business conditions) consumption again began to increase. Tobacco taxes in Latvia were lowered in 1937, partly to offset the increased cost of raw materials resulting from the devaluation of the currency in September 1936. In Lithuania, taxes and selling prices of medium- and high-grade products were reduced on July 18, 1938, while prices of low-grade products remained practically unchanged.

Government control of the tobacco industry in these countries is extensive. Prices of tobacco products are largely fixed, trade is regulated, and home-grown leaf production is controlled. The Latvian Government took over the operation of one of the larger tobacco factories in March 1937. Both Latvia and Lithuania encourage the importation of increased quantities of Russian leaf. Lithuania has agreed to take quantities considerably in excess of manufacturers' requirements, the surplus being resold on Western European markets. Estonia and Latvia both restrict leaf imports by Government permits, with the result that manufacturers have not always been able to obtain the desired quantities of American leaf.

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TURKEY INVITES EXHIBITORS OF AGRICULTURAL MACHINERY TO ANKARA

An invitation from the Turkish Ministry of Agriculture to American manufacturers of agricultural implements and machinery to take part in an exhibition to be held in Ankara, Turkey, in April 1940 has recently been forwarded through the American Embassy at Istanbul to the United States Department of Agriculture. The pamphlets and documents submitted with the invitation evidence the Turkish Government's determination to bring about a speedy adoption of improved agricultural methods in that country.

As a preliminary to the exhibition, a conference, referred to as the First Village and Agricultural Reconstruction Congress, is being held in Ankara during the month of November 1938. The lapse of 18 months between the congress and the exhibition will provide occasion for research and investigation, as well as for the organization of experimental work to crystalize that phase of Turkish village and agricultural policy dealing with modern agricultural methods. American firms are invited by the Turkish Ministry of Agriculture to send in catalogs, photographs, and models of their products as soon as it is conveniently possible to do so.

The scope of the exhibition in April 1940 will not be confined to a simple display of industrial machinery. It is at this exhibition that Turkey will select the types of agricultural machinery best suited to the needs of the country and grant them special exemption from import duties. Ample space for the erection of stands and demonstration areas will be placed at the disposal of participants. Models exhibited and presented to the Turkish Government will be placed in the Museum of Rural Life and Agriculture for permanent display.

The Turkish Ministry of Agriculture has planned an important long-range program for the education of Turkish villagers, according to the Embassy. The objective is an improvement not only in agricultural methods but also in farm living conditions. The November 1938 congress is the first official step toward the accomplishment of that objective. The International Exhibition of Agricultural Implements and Machines in April 1940 is expected to be an important stimulus to the adoption of modern methods of production.

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ARGENTINA PROVIDES FOR LIQUIDATION AND REFINANCING OF MORTGAGE DEBTS

The liquidation and refinancing of private mortgage debts were provided for in a new law passed by the Argentine Congress on September 29 and effective October 11, 1938, according to a report received by the Buenos Aires office of the Bureau of Agricultural Economics. The new law terminated the mortgage moratorium which had been in effect since October 16, 1933.

In accordance with the terms of the new law, outstanding mortgage debts incurred before October 20, 1933, in the Federal capital and before the twenty-eighth of the same month and year in the rest of the Republic may be liquidated or refinanced in any one of four ways.

1. The debtor may elect to liquidate his mortgage debt in 5 years at an interest rate not to exceed 6 percent. Under this plan, if the interest stipulated in the original mortgage is more than 6 percent, the debtor benefits from the reduced rate. Or, if the mortgage has less than 5 years to run, the debtor may take advantage of the full 5-year period to liquidate his indebtedness.

2. The debtor may elect to liquidate his mortgage in 10 years, in which case the rate of interest stipulated in the original mortgage agreement is to be paid. Under this plan, if the debtor's mortgage is due in, say, 5 years, he has the option of paying the total in 10 years instead of 5 on a reduced amortization basis but at the rate of interest established in the original mortgage agreement.

3. Where the mortgage debt may be liquidated in annual installments not exceeding 10 percent of the original capital, payments are to begin in 1939 in accordance with the terms stipulated in the original mortgage.

4. In the case of mortgages up to 15,000 pesos on city property and 20,000 pesos on farm property, the debtor may obtain a loan from the National Mortgage Bank bearing interest at the rate of 5 percent in an amount up to 65 percent of the appraised value of the property, determined in accordance with the procedure established by the bank. This option is primarily in the interest of small mortgage debtors, probably including the greater number, although not the bulk of the outstanding mortgage debt. This out-and-out refinancing by the National Mortgage Bank liquidates the old mortgage and issues a new one in its place, thus giving the debtor a longer time in which to pay off his debt (up to 36 years), together with a lower rate of interest.

It will be observed that the first three plans merely prescribe a new basis on which debtors who availed themselves of the privileges accorded by the mortgage moratorium law, in effect from October 1933 to October 1938, may continue the liquidation of their mortgage debts.

The provisions of this law apply only to so-called private mortgages and not to those held by the National Mortgage Bank, which holds approximately 30 percent of the total mortgage debt of the country. Incidentally, with the expiration of the mortgage moratorium on October 16, 1938, the interest rate and commission of 1 percent and three-fourths of 1 percent, respectively, which were suspended during the period of the moratorium, are again restored to 6 percent plus three-fourths of 1 percent, or a total of 6.75 percent.

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MEXICO ESTABLISHES GOVERNMENT PRICE CONTROL

Governmental fixing of the prices of articles of necessity in Mexico was provided for in a decree dated October 4, authorizing the Mexican Ministry of National

Economy to fix the maximum prices at which specified products may be sold to consumers in that country, according to a report received by the Bureau of Agricultural Economics from the American consulate general in Mexico City.

The products for which maximum prices are to be established are corn, corn meal, tortillas, beans, rice, wheat, flour, bread, potatoes, salt, charcoal, lard and other edible fats, milk, sugar, soap, cacao, beef, pork, mutton and other livestock and meat products, fish, medicines of all kinds, cotton textiles, and petroleum and its derivatives.

In determining the level at which to fix maximum prices, the Ministry of National Economy must cooperate with a Central Consulting Committee in Mexico City. This committee, in turn, must cooperate with a State Consulting Committee in each State capital. The latter are obliged to cooperate with such local subcommittees as each State committee may establish. The central committee is headed by the Ministry of National Economy and each State committee by a representative of that Ministry.

The committees are empowered to obtain all necessary statistical and economic data relative to stocks on hand and sales movement. After consultation with the committees, the Ministry of National Economy is empowered not only to fix the maximum prices at which the specified products are to be sold but also to enforce the obligation on the part of dealers to place existing stocks on sale at prices not to exceed the fixed maximum.

While the regulation became effective on October 12, 1938, no information is available yet relative to the maximum level at which the specified products may be sold. The official price lists, no doubt, will be issued from time to time by separate decree as the committees complete their investigations.

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CHILE TO MAKE LOANS TO SMALL FARMERS

In a decree published October 17, 1938, the Chilean Government authorized the semi-autonomous Farm Credit Bank to loan up to 30 million paper pesos ($1,200,000) to small farmers, according to a report received in the Bureau of Agricultural Economics from the American consulate general in Santiago. Owners or lessees having land under cultivation valued at not more than 50,000 pesos ($2,000) are considered to be small farmers for the purposes of the law.

Of the $1,200,000 thus made available, $800,000 are to be allotted to farmers desiring loans not exceeding $200 each and $400,000 to those desiring loans not exceeding $400 each. Preference is to be given to farmers desiring loans for the purchase of seeds, tools, oxen and other livestock, and for the planting of fruit trees and timber. The loans are to run for a period of 7 years at an interest rate of 5 percent and will be made without notarial or other charges.

Since its establishment in 1927 the Chilean Farm Credit Bank has been of great service to farmers in providing loans at an interest rate of 5 percent per

annum, according to the report. This is far less than the interest rate charged by commercial banks. From 1927 through 1937, the bank has completed 45,000 loans involving a total of $30,000,000 or an average of about $670 each.

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